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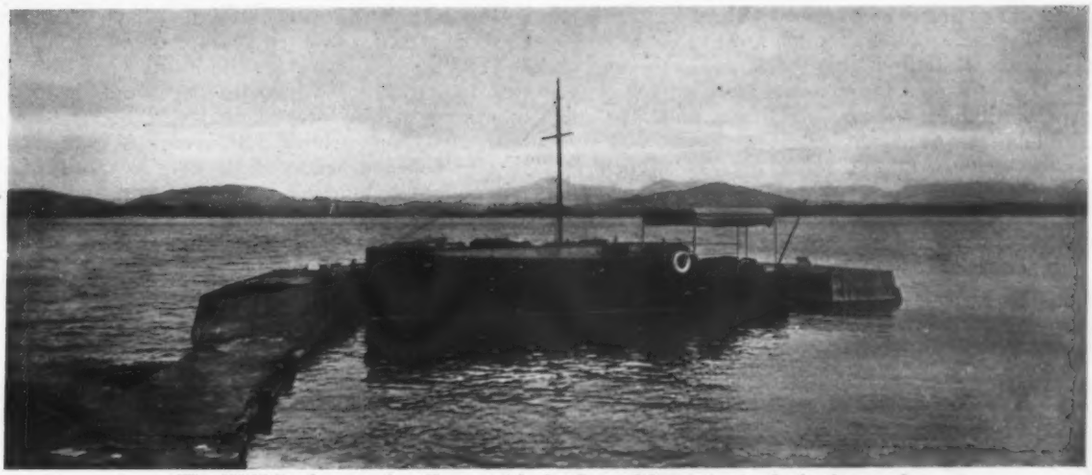


The *Wild Duck* moored at Essex, with the Green Mountains in the background.

Northward to the Saguenay in *Wild Duck*

A Long Summer Cruise to the St. Lawrence Estuary in a Small Boat

By JOHN T. ROWLAND

WHILE we were contemplating the St. Lawrence cruise a friend who had been there looked over the *Wild Duck* and said: "She'll make it, I guess."

"Make it?" said I. "Great Scott, man, it's nothing but rivers and canals!"

"The St. Lawrence can get pretty mean down below Quebec," he replied mildly, "and a north wind kicks up quite a sea on Lake Champlain. But your boat is good for it, I guess."

I had known this man for years as a good salt water sailor who was not afraid of a breeze, and was sorely puzzled. It had been my idea that the most hazardous part of the trip would be dodging traffic in the Harlem River—the rest seemed nothing but a sort of aquatic motor trip whose worst danger would be getting stuck in the mud. Lake Champlain was only some twelve miles across at its widest point and the St. Lawrence did not begin to widen out till one was down almost to the Gulf. I decided my friend had gone balmy in his old age, and went back to work on the motor. Most of my time since then (July 4 to October 1) has been spent in making that cruise, and I have learned—well, quite a number of things. They may interest YACHTING readers who are not familiar with that neck of the woods.

First, the route. From New York up the Hudson to Troy, thence through the canalized upper Hudson River and State barge canal to Lake Champlain, which one enters at its southern end. Thence northward the length of Lake Champlain to Rouse's Point and down the Richelieu River (canalized in part) to the St. Lawrence at Sorel. Up to this point you are going steadily north—a more direct cross country route could hardly be devised—and it is no wonder that for two centuries it was the most important and the most hotly contested trade route on the continent. Every foot of it is replete with historic interest, but of that more anon. At Sorel one may either turn west and ascend the St. Lawrence to the Great Lakes *via* Montreal, or go down it *via* Quebec to the St. Lawrence estuary and Gulf. We chose the latter course and made our goal the Saguenay River, which enters the St. Lawrence from the north about 120 miles below Quebec.

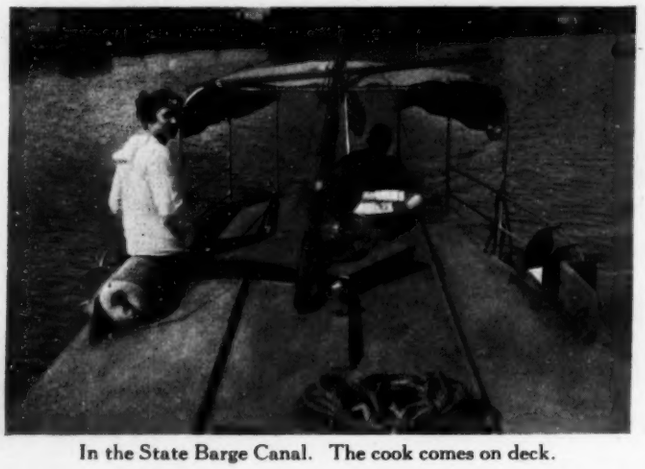
I have given the route in this detail because there seems to be a pretty general idea that you have to go through the Erie canal. Perhaps, therefore, a word of geography may not be amiss at this point. At Troy the Mohawk River enters the Hudson from the northwest. The Erie canal follows in general the line of the Mohawk; the Champlain canal, on the other hand, continues north along the Hudson River proper. These two routes form a wide V, with the Adirondacks between them. By taking the canal to Champlain you skirt the eastern boundary of the Adirondacks, and, following on down the Richelieu (which flows north and drains Lake Champlain), you come to the St. Lawrence hundreds of miles below the Great Lakes and only some fifty miles above tide water. This is a great short-cut in going to Quebec.

The controlling depth of water in the State barge canal is 12 feet, but if one is going through to the St. Lawrence he is limited to 6 feet draft by the controlling depth in the canalized portion of the Richelieu; and as a matter of fact anything over four feet is uncomfortable in the latter river, as it is full of shoals and rather poorly marked. With four feet draft or less, however, there is no difficulty on any part of the trip.

Second, the boat. *Wild Duck* is a 36-foot cruising powerboat of the raised deck type, built by Luders and powered with a 25-35 Sterling motor. She has deck con-

trols and handles like a top. She proved an ideal little ship for our work except that her mahogany topsides kept me anxious in the locks. Still, there is no reason why a boat should be damaged if properly handled and fended. A string of old automobile shoes festooned along each side make the best fenders—one may carom off the masonry of the lock and not get hurt. Going up my crew was green—none of them had cruised before in any sort of a boat—and some rather ludicrous, not to say perilous, situations developed, but coming back my wife and I brought the *Duck* through by ourselves without difficulty.

We carried 70 gallons of gas, which was good for 280 miles at 7 knots, our usual cruising speed, and 100 gallons of water. Fine drinking water may be dipped up practically anywhere on Lake Champlain. If your tank is below the waterline, or even partly so, you can save a lot of work by having a direct sea connection. We also



In the State Barge Canal. The cook comes on deck.

carried a large jib and found it very useful not only to steady the ship in a seaway, but to save gas in a country where it costs 42 cents per gallon. With a fresh breeze over the quarter it added a good knot to our speed with the engine making turns for about six.

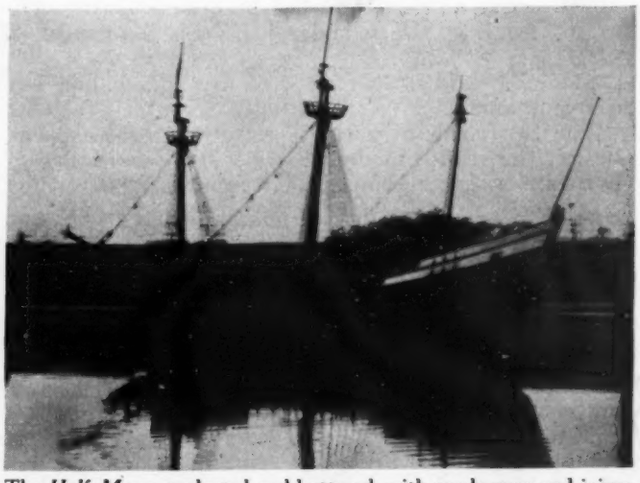
So much for preliminaries. My purpose in this narrative is to touch the high spots and linger only on those which may be of value to others making this cruise. Therefore I shall dismiss the Hudson River as far as Troy with the remark that it is surprising to find such an important river so poorly marked—buoys few and faded and of ranges none at all. It is a great contrast to the St. Lawrence, where one could hardly go wrong if he tried. However, there is no real difficulty in finding the way, though of anchorages the same cannot always be said. The creek at Catskill, N. Y., gave us a comfortable harbor for one night and the next we passed above the Federal lock at Troy in a little cove just south of the entrance to the Erie canal. I can recommend both places.

Here I must digress and let off steam—I only wish it might be high explosive. Tied up to an old coal barge at Troy we saw what is left of the *Half Moon*, that famous ship designed by engineers of the Dutch navy and presented by the Netherlands government to the State of New York at the time of the Hudson-Fulton celebration in 1909. She was an exact replica, down to the last treenail and rope yarn, of the vessel in which Henry Hudson made his great voyage of exploration. In fact, she was really a museum piece and carried even a duplicate of the old navigator's library and instrumental equipment. I went aboard her in 1909 and marveled at the faithfulness with which every detail had been carried out. Here was no scaled-down model of an ancient ship, but the thing itself, full sized and actual, with rig, gear and equipment—a priceless gift to be treasured with reverent care.

I went aboard her again this summer. Battered, neglected and dishevelled, gutted *for firewood* by river pirates, her priceless relics stolen and her joinerwork smashed or hacked away; hardly a thing is left but the solid oak timbers and planking that have been stout enough to resist attack. For ten years, her old caretaker told me, she had lain under water; and in the same breath he added that he had not received his pay from the State for six months, and only stayed on board because he could not bear to see her utterly destroyed. A pathetic touch was that he believed her to be the original *Halv Moen*. I did not undeceive him. We saw her again on our way home and some carpenters were working on her at a yard where they build *canal boats!*

There is only one thing that can and should be done with this wonderful craft. She should be handed over to the Navy to be brought back as nearly as possible to her original condition, and the State of New York should never again be entrusted with anything so rare. Will not the readers of YACHTING start a petition to save what is left of this exact replica of a 16th century ship?

It took me twenty-four hours to get over the helpless rage which sight of the *Half Moon* had inspired, but I observed in a general way that we were still going north. At Troy, as stated above, one leaves sea level by passing through the Federal lock. This is a short distance below the junction of the Mohawk and Hudson Rivers and, therefore, controls the entrance to both the Erie and Champlain canal. It is necessary to show one's permit, which is issued without charge by the State on application to the Commissioner of Canals at Albany. There are no other formalities. This Federal lock is a huge affair that recalls memories of Panama. The *Duck* was almost lost in it and it made us feel very important to see how much water was



The *Half Moon*, neglected and battered, with yards gone and joiner work hacked away, as we found her at Troy.

expended to raise her to the level of the canalized river. Naturally, the effect of the dam, around which this lock affords passage, is to drown the natural river valley for several miles upstream. As a result there is plenty of water, but even if there were not, one could hardly go wrong because the channel is marked with lighted buoys as frequent as lamp posts on a street. Bridges are marked with a red diamond on each abutment of the arch through which one should pass. All along the canalized river, of which there are some 30 miles before the barge canal proper is reached, there are charming little backwaters where one may haul out of the channel and anchor or tie up.

Lock No. 7 marks the entrance to the canal proper. This is not the old, narrow Champlain canal, but a fine, roomy new waterway with only half a dozen locks. Twenty miles of it brought the *Wild Duck* to Whitehall, the northern terminal. We spent the night there and passed down the lock to lake level next morning.

It is a long, winding, narrow but very picturesque way down the arm to where Lake Champlain begins to be a real lake, at Ticonderoga Landing, about 20 miles in all. This is interesting as the site of Fort Ticonderoga, perhaps the most interesting spot historically in the United States. Its ruins lay neglected until a wealthy private citizen undertook its restoration at his own expense. He has succeeded so well that one can hardly tell where the old masonry leaves off and the new begins. The restored barracks serve as a museum where such priceless relics are preserved as the treaty, done on a hide, between Sir William Johnson, representing the British Crown, and the Five Nations of the Iroquois. I am not writing a guide book, but I want to warn you to make no mere flying call at old Fort Ticonderoga. Plan to spend a whole day there—and you'll spend two. The old maps and documents concerning the naval campaigns on Lake Champlain are good for one day by themselves.

We are so accustomed to think of naval affairs in terms of big ships that when one sees the waters where some of our most important actions took place he can only stand still and blink. For example, a whole American fleet was bottled up by the British in Otter Creek and got out by digging a canal to another arm of Lake Champlain. This sounds like a formidable undertaking and I was so interested in seeing where it was done that we took the *Duck* up Otter Creek. To our amazement it proved to be a little meandering stream with trees in some places nearly over-arching its course. At Ticonderoga I found a true

Split Rock Point, Lake Champlain.

representation of the largest vessel in that impounded fleet, and the mystery was explained: she was a little schooner, probably not over forty feet in length. Yet the strategic importance of the command of Lake Champlain in those days cannot be overstated. Things were simpler then.

Leaving Ticonderoga one comes out on somewhat broader waters. The next constriction, some ten miles further on, occurs at Crown Point, which was another point of great military importance. There are ruins of an ancient French fort and of a later British one. Neither have been restored, but the remains of the British quadrangle, still standing, form probably the most extensive ruins of equal age on American soil. One has to go ashore to appreciate them properly, and there is good anchorage in about two fathoms, mud bottom, right off the fort.

After you pass Crown Point the lake begins to assume its true proportions. The shores recede and one gets a first glimpse of the Adirondacks looming high on the western horizon and the Green Mountains forming a rampart above the Vermont shore on the east. Henceforth both ranges are constantly in sight and they become increasingly beautiful as one opens out the broad part of the lake above Split Rock Point. We anchored under the west shore near Essex, and here the first accident of the voyage occurred. My wife and I spent the night with friends ashore, leaving our shipmate, the Novelist, to keep ship. A thunder squall came up and it blew pretty hard, but I still held all lakes in true deep-water contempt and slept unworried. Toward morning the faint bla-a-a-t of our klaxon intruded on my dreams and eventually I

Locks of Richelieu River at Chambly.

got dressed and proceeded to the shore. Great was my surprise to find the ship riding to both anchors and 200 feet of chain, with her stern nearly on the beach. With some asperity the Novelist informed me that he had passed a rotten night—that the bottom was all boulders in which no anchor would hold and that he nearly went overboard while juggling the eighty-pound hook in his pajamas and bare feet on top of a crowned deck that was slipperier than a greased pig and livelier than a broncho. And that was not the worst: his beloved air mattress had blown overboard and departed for parts unknown! We afterwards salvaged it ten miles down shore, though how it had gotten there, considering the direction of the wind, is a mystery I shall never solve.

We had breakfast and proceeded. All the way from New York we had been troubled with a clutch that would not take hold properly in reverse. This made canal navigation not so easy. I had tried repeatedly to get it fixed, but in vain, and had come finally to the conclusion that the only remedy would be a new clutch. At Essex, however, I found the doctor who effected the cure. He is George T. Murphy and he has a dock and a shop (as well as a gas filling station) on the south side of the harbor. He fixed it so quickly that I don't yet know what he did.

The wind still blew fresh out of the northwest and it had an uncanny way of drawing down the lake so as to make a head sea. On salt water this would not have amounted to much, but here, with twenty miles or so to run, it made up a chop that was wonderful to behold. The *Duck* is a splendid sea boat and took it all right, but it was tough on the cook. By noon it was so bad we took to running up into all the little bays and then dashing out round the points. I began to have respect for fresh water.

Lake Champlain from the West Shore. Split Rock Point in right distance.

The greatest width of Lake Champlain is about 12 miles, opposite Burlington, Vermont, but there are so many islands and long points that it seems scarcely half that much. The length, however, is a different matter. From Split Rock to Rouse's Point was upwards of 50 miles and we did well to make it by five o'clock against that wind and sea.

The more one sees of Lake Champlain, the more one realizes the importance of good harbors. These are fairly abundant, as the Government chart shows, but they are not always just where one wants them and it is a mistake to suppose, as I did, that just because it is a fresh water lake you can anchor anywhere. The bottom pitches off steeply in many places from twenty or thirty feet to two or three hundred and, furthermore, a sweep of only a couple of miles is enough for a nasty lop to make up in. Therefore, small and well-sheltered harbors are a prerequisite for comfort. It is well to feel out the bottom pretty carefully with the lead before letting go, because a great deal of it is smooth shale or boulders, in neither of which an anchor will take hold, and the War Department charts, although drawn from surveys by the U. S. Coast Survey, are not so detailed in their descriptions of the bottom as are the C. & G. S. charts to which we are accustomed on salt water. Navigational marks, too, are somewhat scarce—there does not seem to be a lighted buoy on the entire lake—and one needs to use caution in entering river mouths and small bays. The level of the lake descends several feet in the course of the summer, but the charts are reduced to low water datum.

If the above cautions sound somewhat oppressive, they are more than made up for by the delights of exploring enchanting wooded inlets with the mountains rising almost from the shore. As a rule, too, the shores are bold and the water so clear that one can feel his way up into little crevices he would not dare attempt along the coast. Altogether, it is a charming sheet of water. The view from the middle of the lake on a clear day is one of the finest I have ever seen.

At Rouse's Point a curious difficulty beset us. I had not been able to secure charts of the Richelieu River in New York, but counted on getting something of the sort locally. To my chagrin there was no such thing to be had. The Novelist and I talked it over and decided to take a chance. He had logged as many miles in canoes as I had done in deep water and it seemed as though between us we should be able to keep the *Duck* going where it was wet. Lying next to us at the pier was a handsome power yacht that had just come up river. Her skipper had bought in Quebec a sort of plat of the Richelieu made up in a folder. He told me they were sold by Moore, the instrument man, and I now understand the same thing can be bought of Negus in New York. It was a blue print reduced in scale from some old Government chart—a poor sort of thing but showing what Mississippi pilots used to call "the shape of the river." We studied this and set out. To Saint John, the port of entry on the Canadian side, is about twenty miles downstream, and there the canal takes in. We made it without mishap, thanks chiefly to the river being full; but I would advise securing the above-mentioned plat.

This first part of the Richelieu is rather dull, as the country is flat as a fritter; and yet it is pretty, too, with its wide beds of water flowers and the farms coming down to the banks and sleek cattle wading in water to their bellies. Saint John, to our surprise, was not English at all, but French. The further we went into Quebec, the more French it became. There is no trouble with the customs house, but one must be sure to report. As it was Saturday afternoon when we got there, the Inspector was out, but his daughter obligingly found him for us and brought him down aboard. She was a pretty girl and much intrigued by our arrangements.

The old canal winding along beside the Richelieu for ten miles is a treat in spite of the multiplicity of its locks. There is a real tow path and one passes great lumbering canal boats drawn by twelve-horse teams. The lock tenders are most friendly, but they *will* put both lines on the same bollard and then when the water comes in with a rush, it is almost impossible to hold the boat straight. We soon learned that expostulation was vain and ran out supplementary breast lines after the tenders had done their worst.

It is difficult to describe the charm of the lower reaches of the Richelieu. Photographs fail to do it justice. "Quaint" is the word that comes first to mind, but the country is that, and more too. Sleepy little French towns nestle on the river, which runs through them like a main street. At Sorel one comes out with unexpected suddenness upon a real port. There seems to be everything but a place to anchor. This can, however, be found—as follows: Go out into the St. Lawrence and turn sharp right. Follow the docks along past the Government Landing and then turn right again at the first break in the retaining wall. This will bring you into a little basin that you would scarcely suspect from the chart, and there you may lie in perfect security for as long as you like. The most delightful thing we saw there was a dignified old gentleman in a frock coat and high silk hat who "landed" his open powerboat by the simple expedient of running her up at full speed on the shelving bank.

From New York to Sorel we had logged approximately 400 miles. The St. Lawrence looked very impressive after the narrow ways we had been following, but even so it was dwarfed by the great ocean-going ships that passed with almost the frequency of railway trains. From here to the city of Quebec we had 115 miles to go, downstream. I will reserve the account of our trip to the lower river until next month.

(*To be continued*)

"Tearing the heart out of her because the old man ordains speed."

Out of the Mists

An Old Windjammer Moralizes on the Differences Between Sailors of the Past and Present

By Arthur Mason

AT sea, en route from New York to San Francisco, aboard the freight ship *Santa Olivia,* August, 1924.

Six bells have just gone. There is a squeeze to the pulse of the sea, and the ship seems to limp as she churns over the waves. To the westward the sun is slicing clouds in his fling to the deep, and there an orchard of pink blossoms is in the making. Now a tiny speck away off yonder in the turquoise twitters, and night, like a dark horse, trots in on the tropics.

Stretched out in a chair on the boat deck, unseen from anywhere around, unknown in the immensity of ocean, my egotism must needs save itself by the concretions of itemized thought, and the pulsations of the engine (which are alone unfamiliar to such moods at sea) turn my thoughts into comparisons.

The same wide waters in the equatorial latitudes. The same blossoms of sunset. The same mild winds; but ah—and that is something to turn one's thoughts into comparisons—not the same wind-values.

Now there is nothing save a matter of comfort or known latitude to mark anything between a dead calm and a hard blow. Only when the barometer falls ominously does steam take count of the weather. All in between is wasted. Why? Because the wind blows its own song to itself now, and the chantey-man is gone from the seven seas. There is no snatching at a spoonful of wind to puff your royals and perhaps save you aching days in the doldrums. The doldrums themselves have lost their wilful wastefulness of men's time and temper. There is no bending of the one more sail to beat the rival at his own game—no creaking of shrouds and cracking of masts, and tearing out of the heart of her because the Old Man ordains speed.

Sitting there I feel guilty, for the past has me with the thought of sail, and I relax only gradually from the tension of what used to be, to slide down into that deck chair, knowing that my body rests on the steel ship of now—sure and powerful—no matter where my thoughts may choose to roam.

Memories of other years come like the fragrance of pineapple palms; lilting melodies, quaint and tuneful, robbed of sordidness, anxiety, and danger. Old ships and old faces and the girl of the last port, whose laughter, tuneful now, awaits the signal from the sailor on the brig over yonder when her sails, just lowered, be furled. Only yesterday did she tell the helmsman of that three-masted schooner vanishing outward-bound at the horizon's edge that never again——

The little waves lap the *Santa Olivia's* side. Larger waves will come soon. Just such a night it was on one voyage I remember, and that was the last night of calm before 40 days of horror rounding the Horn when she stuck in her tracks only by that Supreme Mercy that most seamen bow to as God. Our clothes were frozen to our backs before it was over, those of us who were left, for in one swoop, one night, the wind tore six of our men, screaming, from our deck and hurled them overboard like writhing bundles of discarded clothing.

The Horn is now only for those who would seek it without fear. The Panama Canal—the silent canal, as it is called, and no one who does not know the Horn at its worst can appreciate the vast quiet of that term—carries them now, and I, too, have passed through it proud that I am an American citizen, not for the first, but for the most reverent time. Oh, the men who needn't have gone! The rough, simple, brave, abandoned men! There is no cursing on the ships as the canal takes them. No splicing the main brace to cheat the fear of death, no chewing of tobacco

c. mbs to cheat their stomachs until the elements would re ix their death-clutch of the galley stove.

It has been many years since I last visited the Central American ports. They haven't yet started to change any. The dark-skinned native still meets you with the lighters or barges to carry your cargo ashore, and you lie at anchor and bake in the sun while rivers run out of you, and the baking night descends upon you, and you turn and twist in your bed, wondering if the Lord will hear your prayers to send a bit of a breeze your way. A bit of a song sometimes reaches you, if you be not anchored out where only the sluggish waters sing, but breeze there is none.

Once, in an English bark, we arrived at such a spot after a terrific bout with the Horn, and, rather unusually, a hard storm afterwards when we should have had fair winds. We were days without what one could call food, and, once in port, were half famished. Of our old Welsh captain my memory is still fresh, and to this day my "tummy" hangs limp at the thought of his lime-juice miserliness. He let us go ashore piecemeal, and grudgingly, with fifty cents to spend—our pay was thirty shillings a month—and on the ship we were fed no better for what he had saved on our diet around the Horn.

One day we complained of being shorted on potatoes.

"How many are they getting now?" he asked the steward.

"One spud the man, sir," answered the steward solemnly.

"Well," said the captain, "give the beggars two, and let them bust their bloody selves."

Another time he asked the steward:

"How are those hens of mine getting on?"

"There's two eggs in the pen, sir," the steward answered proudly.

The captain looked at the mates, who were within hearing.

"Serve my breakfast in my room this morning," he said languidly, "I am not feeling so very well. And, steward, just fry those two eggs—both sides, you know."

"Rough and uncouth, and impossible, if you like, but men with colored, prismatic souls."

The lime-juice mates sniffed furtively; well they knew that they would not see the crumb even of an egg-shell!

We had our choice in those days. Sail on an English ship and be neglected in quarters and food and pay, and be considered in our work, or sail on the American ships with better pay, quarters and good food, and be fairly worked to skin and bone. Sometimes one seemed easier to bear, sometimes the other, and the sailor became known the world over for his fickleness.

The old Welshman and his old ship have both long since slipped their moorings and a better day, all 'round, has dawned for the ocean's children. The seamen of steam own their own homes ashore if they want to, and if they want to be neat and decent, there is nothing to prevent, and their food is plentiful and palatable.

I wonder why so many memories come upon me of food?

There was another old captain with whom I sailed as mate. The old fellow kept two kinds of condensed milk on the table. One was highly diluted, and stood for the mates to get; the other, standing at his right hand, poured thick and creamy, and disappeared when he left the table. But the pickle-bottle was not left to the tender mercies of the steward. That the Old Man stuck in his own pocket when he left the table, and sometimes it would stay there till the next meal! Unforgettable injustice to seamen of a childish mind!

On that same ship we had a musical mate. It did seem that if you lifted a rope yarn from the deck he would want you to put a chantey to it. He was big and tough, and a terrible fighter, and he enforced his musical ideas on a shrinking crew. They were afraid of him and sang for all they were worth at his bidding, regardless of mood or weather, and weather means mood to a sailor. Once it was cold and blowing, and the heart of the forecastle was lower than the barometer, but the mate wanted a song.

"Take a pull on the lee fore braces," he shouted, and the shivering crew caught hold. But the song was not there.

The mate walked up to the first man, who happened to be a Russian Finn. "Song, damn you!" he cried, with a wallop over the head. The Finn, miserably defending himself with hands clutching his hair, cried his willingness to sing in white-capped profanity.

"That's better," said the mate, as the quavering notes of *Ranzo* guttered into the frost. "Put a little harmony into whatever you do, men."

To-day there are no chanties sung; that part of old ocean is dead; now sailors go around with morbid faces and when they have to pull a rope they might as well be landlubbers—there is not a chirrup out of them. Neither do they seem to see the sunsets nor the stars. It's sleep they want, with their eight hours on and their sixteen hours off. Why, in my day, I've seen men come in from ten or twelve hours' stormy duty and, peeling off their soaking clothes, get into their bunks with a pencil and paper and a pannikin of coffee and start writing poetry with their dripping beard erasing what they set down as fast as it was written. I doubt if I ever sailed a ship that didn't have its poet. Rough and uncouth, and impossible, if you like, but sailors with colored, prismatic souls, at least.

Perhaps, ah, perhaps, I am too hard on the sailors of to-day. Scapa Flow, and the trawlers, and the gallant provision carriers of the Great Years just ended, tell me that I am; for it was not only the old sailors who perished then so silently—not only the old sailors, by any means.

The tropical darkness lifts now, and things show up in shadowy form. I think of sailors I have known to die, and I am surprised how many of them I recall after all these years with real regret—with the feeling that they have influenced me all along, and that their loss has left little scars that may have caused me to be a sailor too. Yet at this hour I do not yet know that one has passed who, also, was a real sailor, and who went ashore to record the sea, and did it so perfectly that for generations the spirit of brave sailors will talk to other young men from library shelves and perhaps impart to them their salty manliness. Conrad is gone; the wireless operator, lounging up with his cigarette, tells me so. I dip my colors.

We chat awhile, and walk, and when I return to my chair the night is well starred, and three bells is striking. There is no object in turning in, so again I go a-wandering with my recollections, for a black rat has run across the deck, stopping near me to sniff and, for a moment, to stare with absorption into my frowning face. Whether or not he knows that long habit has made me an enemy of his kind, I do not know. At least he resumes his retreat with zest until the shadows hide him.

This brings to my mind another captain I sailed with as mate. He was an old man, long past sixty, but supple, and a wonderful ratter. In fact, it was seldom, if ever, that a

rat got away from him. He fairly detested the sight of them, and there was a cordiality between him and his crew on that account, that oiled the wheels of discipline.

The captain wore false teeth, and always when he lay down for a nap he took them out and laid them carefully on a stool by the side of his bed. We were on our way to the South Seas when one night a bold rat stole the lower set. Everyone on the ship was accused impartially of stealing them, and every man was searched, but the teeth could not be found. I, being among the accused, and anxious to clear myself, suggested that it might have been a rat. The captain was hard put to it to answer without the teeth, and he lisped badly.

"What in hell would he want with them?" he snapped. "It ain't any rat." Once started he went on swearing with unforgettable variety while we were turning the cabin inside out in our search for the teeth. Suddenly a rat ran out from the storeroom.

"Look," I shouted, "there he goes!"

The Old Man's eyes blazed red, and he munched his gums together.

"Shut the companion door," he roared, and I slammed it with a bang.

Then commenced the most vicious attack on a rat that I have ever seen. The captain peeled off his clothes as a precaution against the rat running up his trouser-leg, and armed with belaying-pins we chased the rat around the cabin, and knocked dents in the teakwood when we missed him. That was nothing to the old captain. Naked and sweating, he cursed the rat as he ran him. For about an hour we kept up the running fight. News had spread through the ship, and stealthy footsteps on deck heralded the bearded faces that looked solemnly through the skylight at us, shoving each other aside from time to time in perfect silence. The rat managed to disappear entirely.

"Go on deck," said the captain asthmatically, "and look after the ship. The damned rat has got my teeth for good. I'm going to have a sleep."

He lay down exhausted, not even turning down the cabin light. I knew he felt terribly about his teeth. The port in the Fijis, to which we were bound, was small, and there was no hope there of any teeth. About the only pleasure the old fellow ever had was sprucing up to go ashore with dignity suitable to the master of a full-rigged ship, and one of his most earnest toilet preparations had been the pumice-stoning of his teeth, derived, doubtless, from his sternness with regard to decks neatly squeegeed and holystoned. I knew how much he must be suffering down there in his bunk, and I, too, cursed the ship's rats.

Half an hour must have passed. Then there was a terrible rumpus in the cabin; swift shadows pelted across the skylight, and I could hear the sea's profanity coming through the bulkhead. Then all was quiet. I tiptoed down and there stood the Old Man, naked as the day he was born, holding a wriggling rat up by the tail.

"You infernal sneak, you, what did you do with my teeth?" he was asking the rat, then receiving no answer, he rapped his head in disgust against the stairway, and flung him out and overboard.

I asked him if it was the same rat that we had both been after. Yes, he said, and he told me dramatically how the rat had known the danger he was in when we were both after him, and had crawled up under the stool at the head of the captain's bed where the false teeth had been kept. There he stayed until everything seemed quiet, then took a peep out from under the seat of the stool, and—stared right into the eye of the captain! How long they glared at each other, or exactly how they measured each other, I do not know, but when the fight began it was no easy one, to judge from the looks of the Old Man, whose scratches it took several inches of plaster to caul!:.

Two days later the cook found the captain's teeth in a rat's nest near a sack of potatoes, and after that there was no cat or terrier that could equal him in his sniffling and scratching. He never left his teeth on the stool again, but slept with them under his pillow.

* * * * * * *

It is broad day, and heat-shimmers wave in the air as the *Santa Olivia* speeds on her way northward through the Pacific.

It is eight bells now and the watch changes. The snappy young officers mount the bridge, and the ship goes on splitting and spilling the ocean, and the heart of her throbs like that of some huge, live creature, and it is so different from the weaving noises and wailings of ropes, and

"We were bound for Guaymas, Mexico, in an old tub of a bark."

squeakings of blocks of the ships I used to know, and comparisons crowd upon me again.

"Yarning," smiles the captain, as he passes. Young, strong, intelligent, elastic, with a quick humor and the firm mouth of a man.

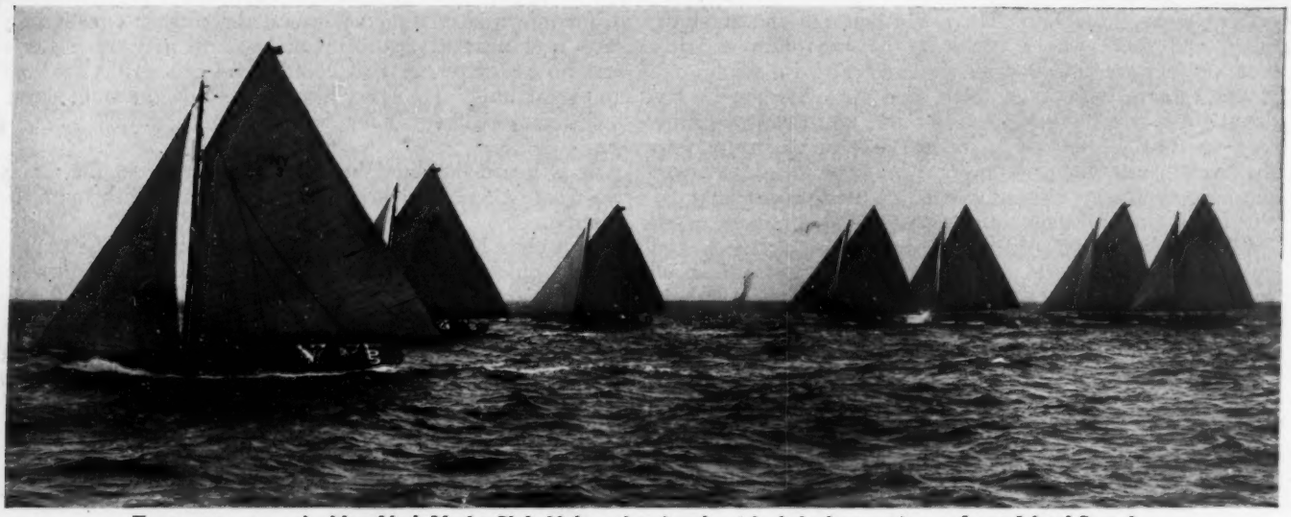
"Yarning," I smile back.

A quick contrast occurs to me as I watch him walking the bridge, and I see and feel that I can almost touch the hairy face, whose piercing eyes were almost buried in beard and wrinkles, the gnarly form, the remarkable gait of another old captain.

He despised anything that steamed and felt that the men who plied in steam were a heartless and treacherous lot. He thought they would run down his three-masted schooner without a backward look.

One night he had an argument with the mate as to whether a light they were looking at in the distance was on a sailing-ship or a steamer. The captain insisted that it was a steamer and was for getting out of the way of this invader of the seas. The argument grew hot. The mate was losing ground, and alternative to defeat, he kicked the skipper in the face. But he tacked ship, nevertheless. When daylight came in and we found that the light had been on a full-rigged ship, the old captain came to me, the second mate, and pleaded with me to lick the mate for him.

(*Continued on page 92*)



For twenty years the New York Yacht Club 30-foot class has furnished the best racing on Long Island Sound.

The New York "Thirties"

An Interesting Sketch of America's Most Famous One-Design Class

By Seabury Lawrence

HAVING passed through their twentieth racing season, it may be said that the New York Yacht Club Thirty-footers offer the finest example in American racing annals of what it means to have a good class hold together. Leaving the building ways at the famed Herreshoff yards at Bristol in the spring of 1905, eighteen of these fine racing sloops took a lively part in the sport of that season. Now, a score of years later, we find that sixteen of the "Thirties" were in commission during the past season and that many of them took part in the racing and cruising throughout the season on Long Island Sound. Considering the age of the class, this is truly a remarkable showing.

Some men whose names are notable in American yacht racing history built and raced the "Thirties," in their earlier years, but it is a question if the sport in this class in the summer of 1905 was any keener than in the summer of 1924. There have been few finishes in the entire twenty years of racing in the class closer than that of this season between *Countess* and *Lena* on the New York Yacht Club squadron run from Newport to the head of Buzzard's Bay, a distance of about 37 nautical miles. This long contest, most of it a run before an increasing southwester, was always close between *Countess* and *Lena*, and at the finish Captain Dunbaugh's yacht was timed by the Race Committee just three seconds ahead of *Lena*. It was close work in a race of such length, but only typical of finishes likely to be seen any day the "Thirties" race. Their history is filled with incidents of this kind.

Season after season has seen them under sail and providing good sport for those who happened to be racing them. Many a Long Island Sound helmsman who arose to exceptional achievements received his early racing education as a "foremast hand" on a Thirty-footer. In this, as well as other ways, the class has been a very beneficial one to American yacht racing, and bids fair to continue in this capacity for some years to come.

The question "Why has the class held together?" may reasonably be asked in face of the fact that so many other good classes have disintegrated. The answer, perhaps, may be summed up in the statement that the "Thirties" are not only possessed of unusual racing qualities, but can be used for cruising. It will be remembered that Captain Ogden Reid's *Lena* this year accompanied the New York Yacht Club fleet on its annual cruise all the way to Bar Harbor. This was a trifle lengthy, perhaps, for a vessel of the size, unless accompanied by a good-sized tender, but there are plentiful accommodations in a "Thirty" for a cruise of short duration. This fact has probably contributed to their long continuity as a racing class.

The names of the original owners of the Thirty-footers include many that will remain fixed for all time in the roster of yacht racing history. The names of some of the boats themselves have changed many times, possibly with every change of ownership, but a few, such as *Alera, Banzai* and *Nautilus,* have remained the same as when they first slid into the waters of Narragansett Bay so many years ago. An interesting incident of the cruise above referred to was that one of the original "Thirties," bearing her original name, was picked up at picturesque Islesboro and continued eastward with the fleet. This was *Linnet,* a sloop which had not been seen in western waters in some years. *Linnet* was built for Amos Tuck French, and was No. 10 on the racing list of the "Thirties." She was sold by Mr. French and disappeared from the roster of the New York Yacht Club for some years, but is now owned by Charles H. Talcott, a member of the club, who keeps the yacht in eastern waters.

Among the very few "Thirties" that have dropped out of the racing fleet is *Phryne* (17), a sloop that was sailed for several seasons by former Commodore J. P. Morgan and which was built by Harry L. Maxwell, now perhaps the premier racing skipper of Western Long Island Sound. As more or less of a "kid skipper," Harry Maxwell got a great deal of his early racing experience in the keen Thirty-foot class of those days. The story of *Phryne,* with her many changes of ownership, is typical of the history of many boats in the class, but it is unfortunate that the yacht for the last few years has been the property of a non-racing owner and has been laid up most of the time.

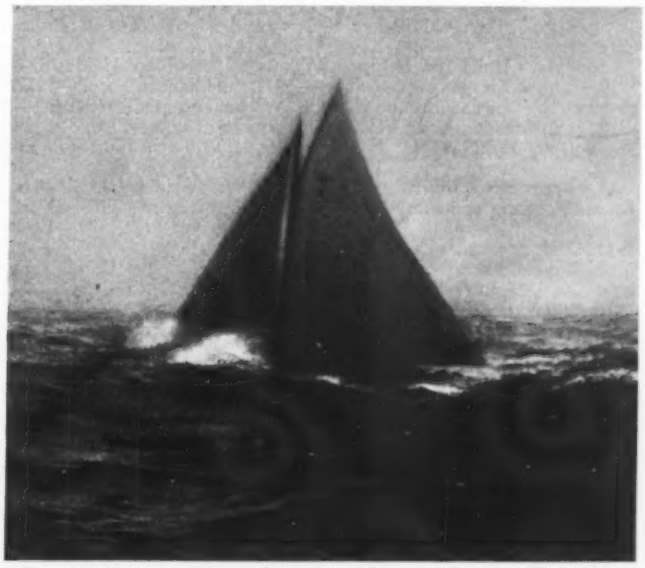
Harry Maxwell, one of the most enthusiastic and best informed of the racing yachtsmen, is still much interested in the Thirty-foot class, and gave the writer some inter-

esting notes on the changes of ownership in the case of *Phryne*. This yacht has always borne her original name, yet few of the Thirties have changed hands so often. It is an amusing fact that she was purchased from the Maxwells by C. W. Wetmore; then sold back to J. Rogers Maxwell by Mr. Wetmore, following which, some time later, Mr. Wetmore again became the owner of the yacht.

Mr. Maxwell explains this unusual sequence of transfers by saying that the first sale of *Phryne* took place during an illness of his father, who, upon recovery, demanded that the boat be bought back again. This was done, and young Harry Maxwell was once more on the quarter deck of a "Thirty" before going to more ambitious ships. *Phryne* later became the property of John F. O'Rourke, who sold her to former Commodore Morgan. After racing the boat for several seasons and enjoying some fine sport, Commodore Morgan built *Grayling* in the Fifty-foot class, and *Phryne* was sold in 1914 to George Nichols, who now has risen to the post of Commodore of the New York Yacht Club. Mr. Nichols sold *Phryne* several years ago to her present owner, M. V. B. Wilcoxson, of New Rochelle, who has not raced the yacht and has refused to sell her, although it is said that several offers have been made for her, one by former Commodore Morgan, who wished to re-purchase the yacht for sentimental reasons.

Fortunately few of the Thirty-footers have suffered the fate of *Phryne* in dropping out of the racing and not being kept up. Most of these fine sloops, excellently constructed in the first place, have been so well cared for that they might be pointed out as new boats to anyone not familiar with their history, without having a question raised as to the truth of the statement. The Thirty-footers in commission during the past season, a majority of which raced through the summer, were *Alera, Silhouette, Countess, Lena, Carolita, Amorita, Oriole, Minx, Phantom, Banzai, Nautilus* and *Adios*. Those in commission but which did not race were *Alice, Fiji II, Alida* and *Linnet*.

The old names of the "Thirties" must bring up a train of recollections to veteran yachtsmen of to-day. W. P. Stephens, Recorder of the Yacht Racing Association of Long Island Sound, whose memory is rich in yachting lore, gives some amusing facts in connection with the original names bestowed on some of these sloops. *Anemone Jr.!* There is a name that has not been recorded for years in the summaries of yacht racing. *Anemone Jr.* was No. 18 of the original Thirties and was built by J. Murray Mitchell, described by Mr. Stephens as a "silk-stocking lawyer who went into a tough Tammany district of the old days and captured it for the Republicans." This, at the time, was regarded as quite an achievement.



The "30's" were always known as fine sea boats. This is the *Countess*, then owned by J. B. Dunbaugh, on the run from Provincetown to Gloucester, August 7th, 1922, in a hard breeze and rough sea.

The *Banzai*, one of the 30-footers that has always kept her original name. She is now owned by Edmund Lang.

Mr. Mitchell brought to this country an English ketch called *Anemone*, the first of its type in American waters and thought he could not do better than name his "Thirty" *Anemone Jr.* Under a change of ownership to the late Alfred G. Vanderbilt, Mr. Mitchell's yacht was renamed *Caprice*, afterwards being purchased by Ralph Ellis, who raced her for several seasons. Under the name *Adios* she recently flew the flag of Charles E. Trowbridge, who sold her to Ernest G. Draper, who calls the sloop *Blue Moon*.

Maid of Meudon! What gallant young skipper of to-day will tell off-hand which of the present "Thirties" bore this euphonic title. *Maid of Meudon* was No. 4 (they have always retained the original racing numbers) and was built by W. D. Guthrie, being named for a daughter born at Meudon, France. This yacht was sold out of the club, but returned to the racing lists once more as the property of W. Gilman Low, Jr., whose forebears owned some noted clipper ships in the American merchant marine. Flying the old house-flag of the Lows, she was named *Houqua* after one of the clipper ships, and bore that name for several seasons. Also at different times she bore the names *Juniata* and *Melody*. *Houqua* was purchased from Mr. Low by J. B. Dunbaugh, who renamed her *Countess*. The yacht raced well under Mr. Dunbaugh's ownership and in 1923 won the championship of Long Island Sound in her class. *Countess* recently became the property of C. Sherman Hoyt, who has been a notably successful helmsman in the Six-meter class.

A roster of the original owners of the Thirties contains names that have loomed large at times in American yachting. To begin at the beginning with No. 1, *Alera* (a name that has never been changed) was built for those noted young skippers, J. W. and E. P. Alker; *Ibis*, No. 2 (now *Silhouette*), by C. O'Donnell Iselin *Pintail* (5), August Belmont; *Dahinda* (6), W. Butler Duncan; *Neola II* (12), George M. Pynchon; *Minx* (13), now *Phantom*, Howard Willets; *Cara Mia* (14), now *Fiji II*, Stuyvesant Wainwright; *Banzai* (15), Newbury Lawton; *Nautilus* (16), Addison G. and H. Wilmer Hanan.

With such a start in life it is scarcely to be wondered at that the class has endured and flourished. Few of the "Thirties" have changed hands oftener or raced better than the present *Minx* (12), which is owned and raced by W. H. Hoffman, a capable young skipper who this year

captured the class championship with his yacht. *Minx* was originally *Neola II.* Mr. Hoffman bought the sloop last spring from J. A. Mahlstedt, of the Larchmont Yacht Club, who had raced her several seasons under the name *Okee.* Prior to this, Holland Duell owned the sloop, calling her *Rowdy,* a name that he has continued with his Forty-footer, winner of the Yacht Racing Association championship in the Forty-foot class the past season.

J. A. Mahlstedt was owner of the sloop at two different periods, purchasing her the first time from Mr. Duell in 1914 and naming her *Okee,* a title Capt. Mahlstedt has had a predilection for. In 1912 he had purchased his first Thirty-footer, the original *Atair* (No. 3, built for Cord Meyer), naming her *Okee II,* afterward selling her to Irving E. Raymond. This vessel changed hands several times after this, having as successive names *Hope, Lesmona, Carita* and *Alberta II,* and is now named *Alida,* under the ownership of Wilbur Veitch.

While the Thirty-footers with their gaff mainsails may

The "30's" as they were originally, with short bowsprit.

not be as fast as some of the more modern vessels with Marconi rig, when on the wind, they possibly make up for this deficiency when reaching or running. They are fine heavy weather boats, and no better demonstration of their ability in this direction could be had than was given by *Lena,* sailed by Ogden Reid, on the day of the King's Cup off Newport, August 22, 1923. This was a very heavy day, the wind from north and northwest blowing from 35 to 45 miles, with a big sea running. Although the conditions were such that the schooners and larger sloops had all the wind and sea they wanted, *Lena* sailed over the 30-mile ocean course without mishap and won a special prize. Capt. Reid was congratulated for his pluck in taking the little sloop out under such conditions. *Lena* was originally the *Pintail* (No. 5), built by August Belmont for his son, August Belmont, Jr. She was sold by the Belmonts to former Commodore E. D. Morgan, who raced her under the name *Gossip;* then became the property of Lloyd C. Griscom (*Yolanda*), and in 1913 was purchased by her present owner.

One of the present-day Thirty-footer enthusiasts is Gherardi Davis, chairman of the Race Committee of the New York Yacht Club and owner of *Alice* (No. 7). This sloop was originally the *Tabasco,* built for Henry F. Lippitt and raced for almost 10 years by Johnston de Forest under the name *Nepsi.* Mr. Davis, whose summer home is at Sea Gate, keeps her in Gravesend Bay, and is fond of making trips out around the Ambrose Channel light vessel.

In gathering data for a record of this truly remarkable yacht racing class the writer received valuable assistance from W. P. Stephens, recorder of the Yacht Racing Association of Long Island Sound, and Harry L. Maxwell. The following complete list of the Thirties and their many owners was compiled from the records of Mr. Stephens:

1. *Alera.* Built for A. H. and J. W. Alker. E. P. Alker part owner, 1910. 1914, John L. Cutler—1919, Francis W. Belknap—1924, Howard F. Whitney.

2. *Ibis.* Built for C. O'Donnell Iselin. 1908, J. P. Morgan, Jr.—1910, Howard W. Maxwell—1913, W. H. Busk—1914, John A. Ten Eyck, 3d (*Nirvana*)—1916, E. H. Prentice (*Silhouette*)—1917, Charles Hollingshead—1917, H. Francis Duryea—1918, C. Rexford Croul—1921, R. H. Amberg.

3. *Atair.* Built for Cord Meyer (George C. and J. Edward Meyer). 1912, J. A. Mahlstedt (*Okee II*)—1915, Irving E. Raymond (*Hope*) (named *Carita* for a short time)—1917, Gustav B. Kulenkampff (*Lesmona*)—1918, Laurence Marx (*Alberta*)—1923, Wilbur Veitch (*Alida*).

4. *Maid of Meudon.* Built for W. D. Guthrie. 1906, E. S. Willard—1907, W. J. Matheson (*Melody*)—1910, Stephen C. Hunter, (*Juanita*)—1913, John T. Pratt—1917, W. Gilman Low, Jr. (*Houqua*)—1922, J. B. Dunbaugh (*Countess*)—1924, C. Sherman Hoyt.

5. *Pintail.* Built for August Belmont (August Belmont, Jr.). 1909, E. D. Morgan (*Gossip*)—1912, Lloyd C. Griscom (*Yolanda*)—1913, Ogden Reid (*Lena*).

6. *Dahinda.* Built for W. Butler Duncan, Jr. 1907, W. Emlen Roosevelt—1910, George Emlen Roosevelt—1914, Frank B. Draper (*Playmate*)—1920, H. E. Glover, Walter Benhizer and Herman Bruns—1923, John E. Beggs—1924, Edward P. Flanagan and C. H. Whitehead (*Dahinda*)—1924, Henry C. Frisch.

7. *Tabasco.* Built for Henry F. Lippitt. 1906, W. Barklie Henry—1907, Johnston de Forest (*Nepsi*)—1916, Gherardi Davis (*Alice*).

8. *Carlita.* Built for Oliver Harriman. 1907, Frank C. Swan—1911, Gustav B. Kulenkampff—1915, Stephen H. Brown (*Carolita*)—1917, Morton H. Smith—1918, Chester M. Curry—1919, W. H. Childs (*Delight?*)—1921, Ormsby M. Mitchell (*Carolita*).

9. *Adelaide II.* Built for Philip H. and George A. Adee. 1910, F. B. Bragdon (*Amorita*)—1923, A. G. Paine, 3d—1923, E. B. Hall, Jr.—1924, Hendon Chubb.

10. *Linnet.* Built for Amos Tuck French. 1906, Francis R. Cooley—1916, Charles H. Talcott.

11. *Oriole.* Built for Lyman Delano. 1906, Charles A. Goodwin—1913, Edmund Fish—1917, S. C. Pirie.

12. *Neola II.* Built for George M. Pynchon. 1908, Ralph N. Ellis (*Hera II*)—1910, Holland S. Duell (*Rowdy*)—1914, J. A. Mahlstedt (*Okee*)—1916, L. G. Hamersly—1917, Alfred H. Morris (*Amaranth*)—1919, Charles Belsky (*Rowdy*)—1921, H. L. Curry—1923, J. A. Mahlstedt (*Okee*)—1923, W. H. Hoffman (*Minx*).

13. *Minx.* Built for Howard Willets. 1909, John J. Mason—1910, James Pierpont (*Cornelia*)—1911, William C. Pell—1912, Sydney F. Ward (*Miriam*)—1914, Wilson Marshall (*Minx*)—1916, Johnston de Forest—1919, Theodore S. Clark—1920, Robert M. Nelson—1922, W. H. Hoffman—1924, T. J. S. Flint (*Phantom*).

14. *Cara Mia.* Built for Stuyvesant Wainwright. 1907, Mrs. E. M. Scott (*Carmelita,* 1909)—1910, F. T. Catlin—1917, D. R. Richardson (*Mizpah*)—1922, Lucien T. Warner (*Fiji II*)—1924. Wm. D. Flanders.

15. *Banzai.* Built for Newbury D. Lawton. 1906, C. D. Mallory—1909, Gottfried Piel—1914, Edmund Lang.

16. *Nautilus.* Built for A. G. and H. W. Hanan. 1908, E. E. Dickinson, Jr.—1913, Charles H. Mitchell—1916, W. Barklie Henry—1919, Arthur Iselin—1920, Wm. H. Silk—1920, Harvey J. Flint (*Wanderer VIII*)—1920, M. E. Hatfield (*Nautilus*)—1923, J. H. Ottley.

17. *Phryne.* Built for Henry L. Maxwell. 1906, Charles W. Wetmore—1909, John F. O'Rourke—1910, J. P. Morgan, Jr.—1914, George Nichols—1915, M. V. B. Wilcoxson.

18. *Anemone II.* Built for John Murray Mitchell. 1906, Alfred G. Vanderbilt (*Caprice*)—1910, Mrs. Alfred G. Vanderbilt—1912, Ralph N. Ellis—1913, Samuel C. Hopkins—1915, J. W. and E. P. Alker (*Alerion II*)—1916, Frederick L. Richards (*Adios*)—1922, H. T. Hornidge—1923, Charles E. Trowbridge—1924, Ernest G. Draper (*Blue Moon*).

"There were times when she buried her bowsprit,
With the green sea washing her rail."

Memories

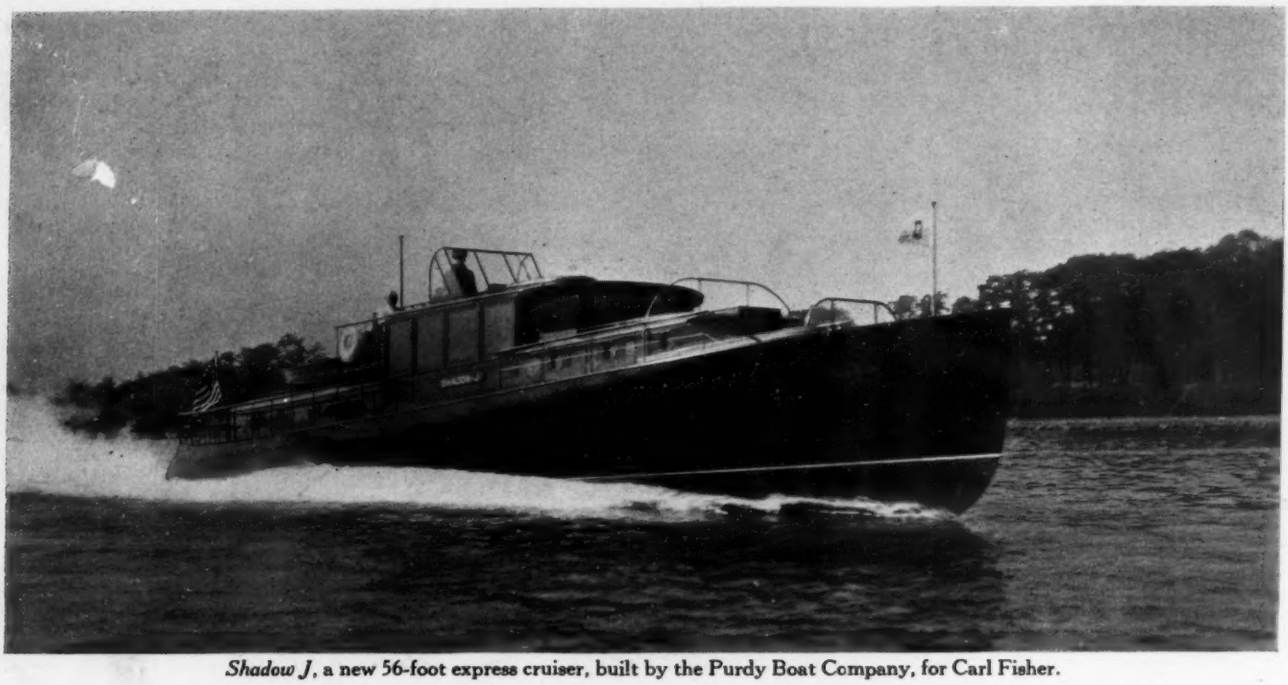
ALFRED STUART MYERS

WHEN the yacht's high and dry in the shipyard,
With the canvas over her hull;
When the summer is far behind us
And the winter grows dreary and dull—
Then it's fine to gather about us
A lot of the same old crew,
And smoke through a sociable evening,
The same as we used to do.

We talk of those glorious hours
When the deck was under our feet—
When we set a course to the east'ard,
Where the sea and the skyline meet;
And whether we drove her to windward,
Or ran, when the breeze was free,
Our cares blew off to loo'ard
Like the crest from a curling sea!

There were times when she rolled in the doldrums,
With the reef-points slatting the sail;
There were times when she buried her bowsprit,
With the green sea washing her rail;
But we made our port in the gloaming
And the anchor bit in fast—
Then a friendly pipe, and turned in snug,
With the wavelets rippling past.

Yes, it's fine to gather about us
A lot of the same old crew,
And call back those happy hours
When a summer sky was blue.
And though, for a time, we're "anchored,"
And doomed to the solid land—
We'll sail tonight on a phantom ship,
With a phantom wheel in our hand.

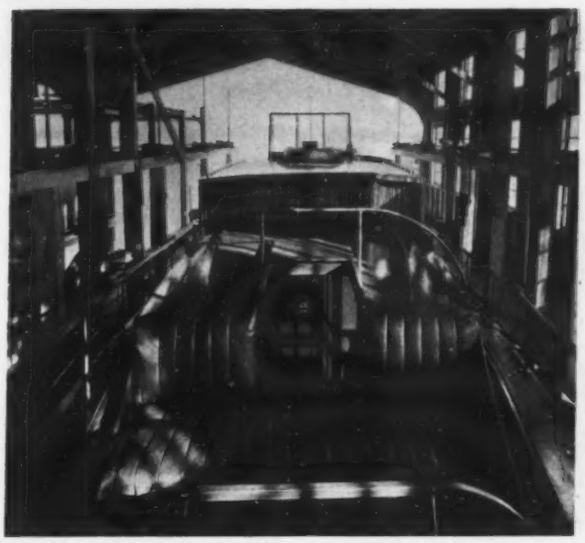


Shadow J, a new 56-foot express cruiser, built by the Purdy Boat Company, for Carl Fisher.

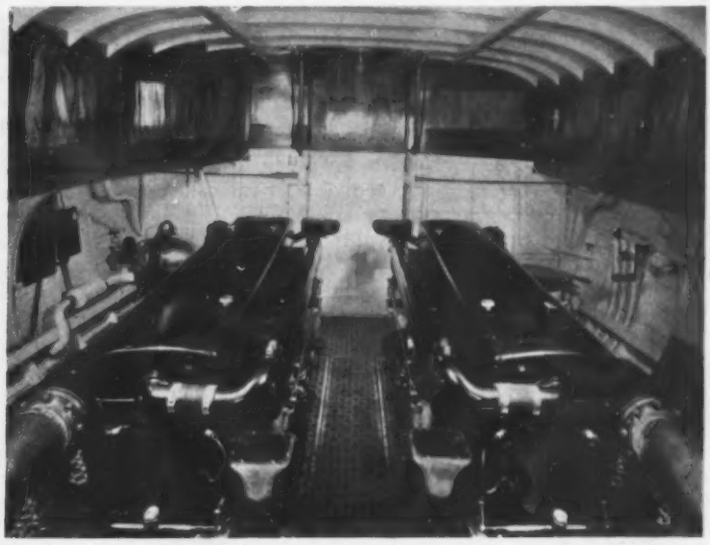
Shadow J, a New Express Cruiser With Unusual Speed

WHEN all the big express cruisers have gathered at Miami this winter there will be seen a new one owned by Carl Fisher, which, it is predicted, will spring a few surprises when she is turned loose, wide open. This new boat, the *Shadow J*, is a handsome day cruiser which her owner expects to use next summer commuting between his home at Port Washington, L. I., and New York City. She is a fine example of craftsmanship,

Interior of deck house of *Shadow J*, looking into forward cabin.



The forward cockpit of *Shadow J* is one of the most inviting places on the yacht when under way.



The two Packard 6-cylinder motors, developing 275 h. p. each, which drive the *Shadow J* 34½ miles an hour.

having been turned out by the Purdy Boat Company, of Trenton, Mich. Her length is 56 feet and she has a beam of 11 feet 6 inches. Powered with two Packard six-cylinder motors, developing 275 horse power each, she has shown 34.5 miles an hour on trial trips with the throttle far from wide open. The motors are of the type developed by this company, for use in the U. S. Navy's airship *Shenandoah*. One of the accompanying pictures shows the unusually good power plant installation.

The boat is handled from a raised deck where all the controls have been centered. A large slanting windshield gives protection to the bridge and the compass and chart case, located on a broad shelf in the windshield recess. The high finish of the white enamel and the large windows in all the cabins and engine room, give unusual light throughout the boat. The deck cabin amidships is a feature which will be greatly appreciated. In the stern and below is located a well-equipped galley and just forward of this, quarters for the crew. She will attract attention wherever she is seen.

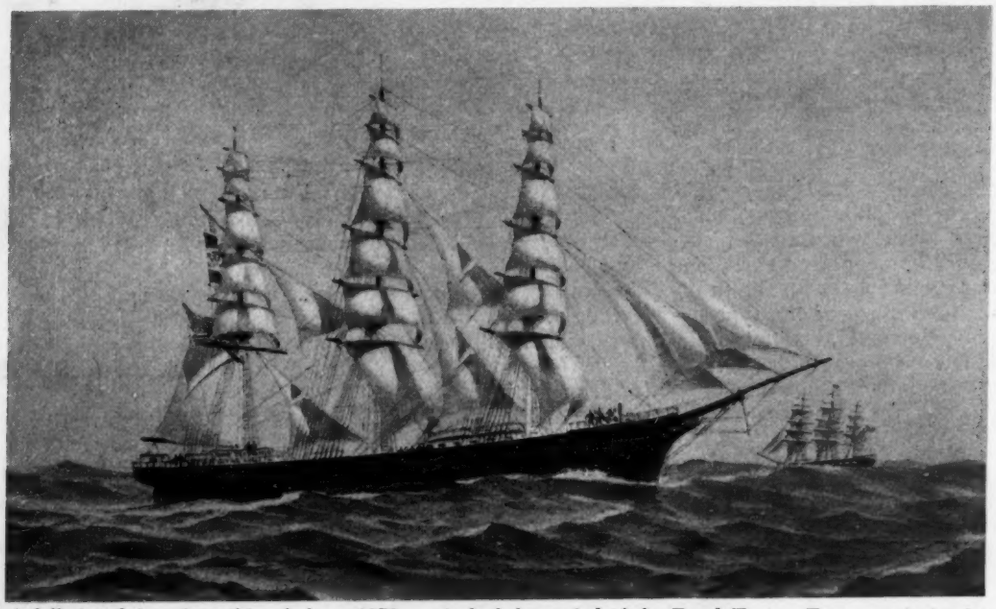
The little Norwegian double-ender *Leiv Eiriksson* leaving Bergen, Norway. Nothing has been heard from the little ship since she left Greenland on September 8th. It is hoped that she was forced back to the Greenland Coast and is wintering there. W. W. Nutting is seen on deck, second from the left. The others are "Art" Hildebrand, J. O. Todahl and B. Fleischer.

Through a Typhoon in the China Sea

Extracts from the Log of the Ship "Enoch Train" on a Voyage from New York towards Hong Kong

SHIP Masters as a rule are not given to writing about their experiences; and yet many of the old-time captains of deep-water sailing ships not only had a keen appreciation of the dramatic value of some of the experiences they went through, but also showed considerable literary ability in the terse way in which they kept their logs, the brief entries that they made therein telling the story in a way that no landsman could do.

We have been fortunate in receiving recently an extract from an old-time ship master, Captain Benjamin Thompson, of the ship *Enoch Train*, telling of a typhoon encountered in the China Sea while the ship was on a voyage from New York toward Hong Kong in 1872, during which the ship was dismasted. The log is just as Captain Thompson wrote it at the time and later turned it in to the agents of the ship, Vernon H. Brown & Company, New York. Although it is kept in the usual style, it gives such a vivid picture of a ship in a typhoon that we believe it will prove particularly interesting to the readers of YACHTING.



A full-rigged American ship of about 1870, typical of the period of the *Enoch Train*. From a painting by F. S. Cozzens.

Mr. Vernon C. Brown, the present head of the firm, writes that he remembers Captain Ben Thompson very well. He says he was a slight, refined-looking man, unusually well educated, with a record as a sail-carrier. He was one of the favorite captains of William F. Weld and he made some famous voyages in one of Weld's old ships called the *Lightning*.

The *Enoch Train* was a full-rigged American ship, typical of the period (1870), and while no pictures of her are available, the one we reproduce shows a ship of this type and period. The log begins in the China Sea, several hundred miles southeast of Hong Kong, where the typhoon was encountered.

Monday, September 30, 1872.

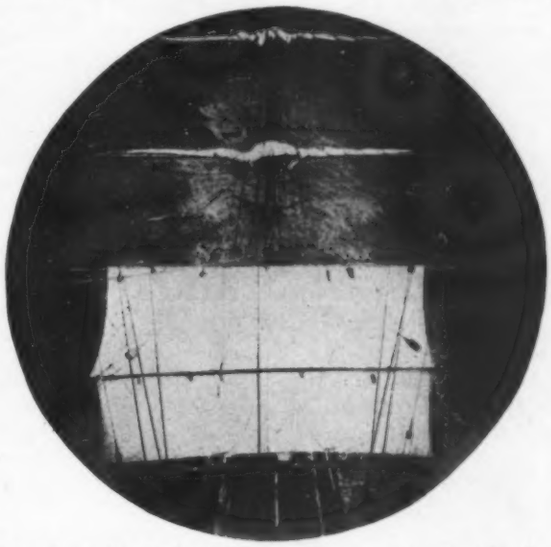
This day begins fresh from N. W. and cloudy; sea making fast. Carried away fore royal yard, sent same on deck. 4 P. M., hard squalls from N. E. and N. to N. N. W. 7 P. M., weather looking wild and dirty. Barometer, 29.70. Furled light sails. 8 P. M., very hard squalls. Furled topgallant sails, mizzen and main courses. Wind coming in gusts from N. W. 10 P. M., squalls increasing, with very sharp lightning and floods of rain. Furled up fore and mizzen topsails. Same up to midnight. Corposants at all mastheads and topgallant yardarms. All through the middle parts, heavy northwest gales with continual very heavy squalls. Furled up main and lower mizzen topsail and reef foresail. Ship on port tack reaching to the eastward. 2 A. M., set main spencer. Daylight, same hard squalls. Sent mizzen royal yard on deck and got everything about decks extra lashed. 11 A. M., weather broke with the sun out; heavy cloud bank all around horizon and a heavy, bad sea running. Day ends hard gale with continual rain and heavy squalls. Barometer steady at 29.60. Latitude 16° 57′ N., longitude 116° 25′ E.

October 1st. This twenty-four hours commences same hard N. W. gale, continual squalls with floods of rain. 4 P. M., the same. Barometer starting. I think the squalls not so heavy. 8 P. M., barometer falling. Furled lower fore topsail and foresail. I now begin to think I am on the southeast verge of a typhoon. Passed extra gaskets on all sails.

Ship now laying finely and heading up to the sea. Midnight, barometer still falling; the squalls increasing and blowing with hurricane violence, with torrents of rain and very sharp lightning. 1 A. M., wind coming so heavy goose-winged the lower main topsail, and at 3 A. M., furled it. Wind veered to west northwest, and ship laying splendidly and making fine weather, if such weather can be called fine. Barometer, 29.30. 6 A. M., wind and squalls coming in fearful gusts from west, with a very bad sea on; ship laying well. At 8 A. M., rapidly falling barometer and squalls increasing in violence. A fearful hurricane. Barometer at 29. Wind coming in gusts. At 11 A. M., our main topmast broke off in the cap and fell to starboard, carrying away mizzen topgallant mast, wreck of topmast lying across lower main topsail and main yards. About meridian shipped a tremendous sea coming in through port fore rigging and over topgallant forecastle, staving our best boat, bulwarks and monkey rail from poop to topgallant forecastle on starboard side, washing overboard water casks and everything movable about the decks. At same time main yard fell across the rail. Lower main topsail yard and wreck of main topmast to leeward, bringing down mizzen topmast, with head of mizzen mast and fore topgallant mast and yard. The wreck alongside smashing and crashing, threatening every mo-

ment to go through the ship's side. The ship falling off and rolling fearfully, with the decks full of water. At the same time sprung steering gear and stove after skylight, flooding the cabin. Thus ends this fearful day. Barometer, 29.3.

October 2nd. This day commences with the same fearful typhoon, rather moderating between squalls, and barometer starting up. All hands employed trying to cut the wreck clear. Barometer, 29.30. At 3 P. M., got clear of wreck; wind gradually hauling to southwest and moderating fast. Sounded the pumps and found 26½ inches of water in well. Rigged the after pumps and set them to work, main pump-gear having been stove when main yard fell. Find cargo has shifted, ship having about three strakes of starboard list, and that about three tiers of the Government stores, together with water casks and stores adrift, going from side to side. Quarter stanchions for coal shifting, board having broken away, and about two-thirds of coal is in the starboard wing. All hands employed pumping ship and securing cargo up to 2 A. M. Gale moderating fast, but a fearful sea still running. 6 A. M., commenced to get things straightened up and ascertain the damage, the sight of which makes me heartsick. The mizzen masthead gone below the cap and all above it. Cross jack yard all that remains, and that secured. Mainmast standing, much cut and the head badly twisted; not a yard on it. When main yard fell across the rail it broke in three pieces, staving monkey-rail on port side and breaking main rail on starboard side, and in one of the starboard rolls launched itself clear of the side. Foremast and fore topmast standing; fore yard cock-billed and starboard yard-arm lashed to starboard fore rail and rigging; lower fore topsail yard broken close to the slings; starboard side gone and port side hanging. Upper fore topsail yard left and I believe good. Flying jibboom broken off close to jib-stay band. Bowsprit has worked badly, lifting all the thick work off of timber heads around topgallant forecastle. Forecastle deck badly started; windlass bitt broken; martingale broken and gear carried away. All the bulwarks gone from poop to topgallant forecastle; monkey-rail the same; main rail started amidships and broken abreast main rigging. Upper fore channel, upper and lower main, upper and lower mizzen channels badly smashed and broken. Main topmast chain plates badly twisted and started off and hanging alongside.



Running before it! Looking down from maintopmast head, showing long wake and upper and lower mizzen topsails. Photograph by W. F. Daniels.

The ship's side is badly cut by the wreck, from forward of main rigging aft, and the copper as far as can be seen badly cut and chafed. Four main rail stanchions broken and cracked. Forward part of afterhouse badly broken and cut. After skylight and hatch house stove; wheelhouse and after bell washed overboard. Decks badly cut and chafed. The day ends with moderate gale from S. S. W., a rising barometer, standing at 29.70. Got spanker bent and gear rigged so we can set it reefed.

October 3rd. Begins moderate from south. All hands employed rigging jury stays, setting up rigging, bending sails and securing what is left of the wreck. Ship under main spencer, reefed spanker and fore topmast staysail. At 6 P. M., calm. Barometer at 29.80. Have repaired steering gear so I can work it, and got jib ready to set; also maintopmast staysail stayed to main masthead. At 8 P. M. ship rolling badly and shipping a good deal of water on our lame side. Middle and last parts calm. 11 A. M., got foreyard across in its place and bands secure and topsail braces to rights. Drift, W. ½ N., 19 miles. Latitude, 17° 13". Longitude, 117° 19".

October 4th. Day commences calm with a short, bad sea on; ship rolling heavily, making it difficult to work aloft. Myself and one man have made new pump gear and got it so it will work. Have laced two topsails together so I can set them whole. Spliced mizzen stays and bent fore topmast staysail on them. At 7, faint, easterly airs; set all sails. Daylight, took off afterhatch and commenced with all hands to re-stow and ascertain damage to cargo. Find beef, pork, bread and tins of meat all stove together, and a stinking, miserable mess. Cleaned up the wreck, re-stowed the good and hove the broken and bad overboard, together with barrel staves, broken boxes and dunnage wood. Judge there to be some thirty to forty barrels of the broken and worthless, besides fifteen to twenty boxes. Day ends hot and calm; ship making about two inches of water per hour.

October 5th. Commences calm, with a short, westerly swell; ship rolling badly; bent main topgallant sail for cross-jack. Crew still employed clearing up between decks. At 7 P. M., had finished re-stowing the cargo. All through the night, calm. At daylight, all hands setting up rigging and employed ship's duty. Day ends calm. Drift in 48 hours, W. 16 miles. Latitude, 17° 12'. Longitude, 117° 06'.

October 6th. This day begins calm. All hands employed setting up headgear and getting things straight. At 4 P. M., light airs from N. E. Wore ship to N. N. W.; steering gear working badly. We are now under jib and foretopmast staysail; two topsails forward and foresail; maintopmast staysail to main masthead; main spencer; foretopmast staysail for mizzen staysail; main topgallant sail bent for cross-jack, and the spanker. Rather a hard rig for a twenty-three foot draft ship to beat to windward with. Day ends calm. Latitude, 17° 09'. Longitude, 116° 41'. Current, S. 83° W., one knot per hour.

October 7th. Begins calm. All hands but one man and one officer below, trimming coal over to port. 4 P. M., light easterly airs. Ship steering to north by east, 1½ miles. 7 P. M., freshening from same. Middle part calm; last part light from northeast. At daylight, all hands below trimming coal; so employed up to meridian. At 11 A. M., squally in the northward. Day ends, heavy banks in the northward with light breezes from N. N. E. Barometer, 30.5. Current, W. 14° N., 21 miles. Latitude, 17° 37'. Longitude, 116° 02'.

October 8th. This twenty-four hours light N. E. breezes, clouding and thickening in the northward. 6 P. M. to midnight, moderate from N. E. by E., squally and rainy. Midnight, freshening from the northeast. Last part, strong monsoon and bad sea; ship rolling heavily; lurching to starboard badly and continually filling the deck. Day ends same. North German steamer passed about ½ mile distant, but paid no attention to our signal; merely set his ensign. Current, 24 miles W. by S. Barometer, 30. Latitude, 19°. Longitude, 114° 36'.

October 9th. This day commences fresh from N. E. by

E. and bad sea. Ship going five knots. 6 P. M., moderate and dying out; inclined easterly; middle part, light from E. N. E. Ship rolling badly. Current, W. by S., 32 miles. Barometer, 30. Latitude, 20° 8′. Longitude, 113° 37′.

October 10th. Commences light N. E. breeze; sea dropping and fine weather. Middle part the same. On starboard tack heading N. N. W. Last part the same, rather freshening. Day ends with fine breeze from N. E. Large numbers of fishing junks in sight. Current, S. W. ½ W., 20 miles. Latitude, 21° 01′. Longitude, 112° 43′.

October 11th. Begins moderate from N. E. 4 P. M., made the land about St. John's Island. 5 P. M., saw the Mandarin Cap. Strong S. W. current. God only knows whether I shall ever get the ship anywhere or not, for I am about discouraged. 4 A. M., wore ship to northward. 6 A. M., spoke a fishing junk and tried to get a pilot, but could not. At 7 A. M. saw the west end of St. John's Island. Find I am setting to the westward all the time. At 11 A. M. wore ship to S. E. by E., Mandarin Cap bearing north. Split jib, cross-jack and fore topsails. This is the hardest luck I ever had. On port tack ship will not lay up to the wind and will be two hours wearing, in spite of all I can do; and on starboard tack cannot keep her out of the wind. Day ends fresh from N. E. and fine. A bad sea on. Current S. W., 30 miles. Barometer, 30.10.

October 12th. This day begins fresh from N. E. by E., heading to S. E. by E. By the bearings of the land making a S. by E. course. Shall have to get where I can get an anchor down or go off to leeward. With the monsoon now fairly set in and current going to S. W., shall fetch Saigon or Singapore, instead of Hong Kong. 10 P. M., tacked to northward. Middle part, fresh from E. N. E. At daylight, by bearing of the land, after heading eleven hours N. and seven hours S. E. have lost twelve miles. Hawcheuen anchorage bearing N. by E.; shall try to work up into it. Day ends light from N. E. by E. Current, 36 miles, S. W. ½ W.

October 13th. Sunday commences light from N. E. to E. and fine. Current going strong to westward. 5 P. M., calm. Anchored in eight fathoms, Hawcheuen Island bearing E. N. E., having altered the bearings of same five points to the westward in eleven hours. Whongchow bearing W. N. W. All through the night faint airs and calms. Current going W. S. W. two knots per hour. Got our best boat over and found she filled. At 8, light airs. Got under way. At 10 o'clock found ship drifting to the westward. Anchored. At 10:30 left the ship with four men and steward and pulled in to the fishing village to Namoma, about eight miles, to try to send letters to Hong Kong. Day ends calm.

October 14th. Commenced calm. At 8 P. M. returned to the ship, having despatched a man overland for Macao, and thence to Hong Kong. Midnight, faint airs from N. N. E. At daylight hove short and got under way. At 9 A. M. calm, having lost about two miles. At 10 A. M. Chinese gunboat, *Suit Sing*, Captain Stewart, came within hail and offered to tow us to a harbor or a safer an-

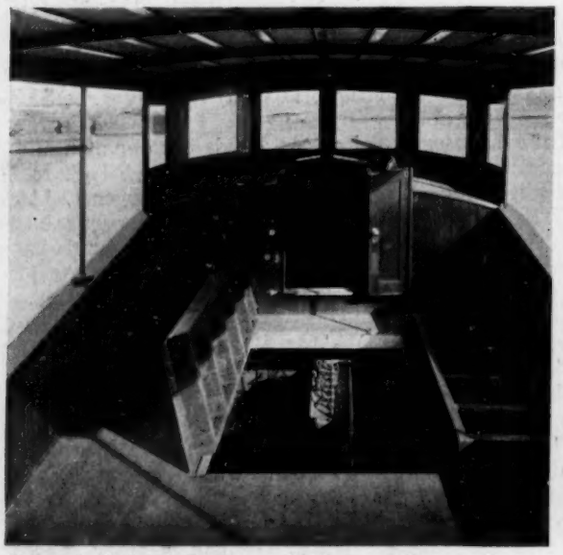
(*Continued on page* 86)

Bayberry, a 35-Foot Standardized Cruiser

A 35-FOOT power cruiser that is all, and more, than one would expect in a boat of this size, is the *Bayberry*, recently completed by the Gordon Boat Building Company for Mr. James T. Stanbury. She is one of the Gordon Deep Sea Cruisers that Harry Gordon has developed in the last few years.

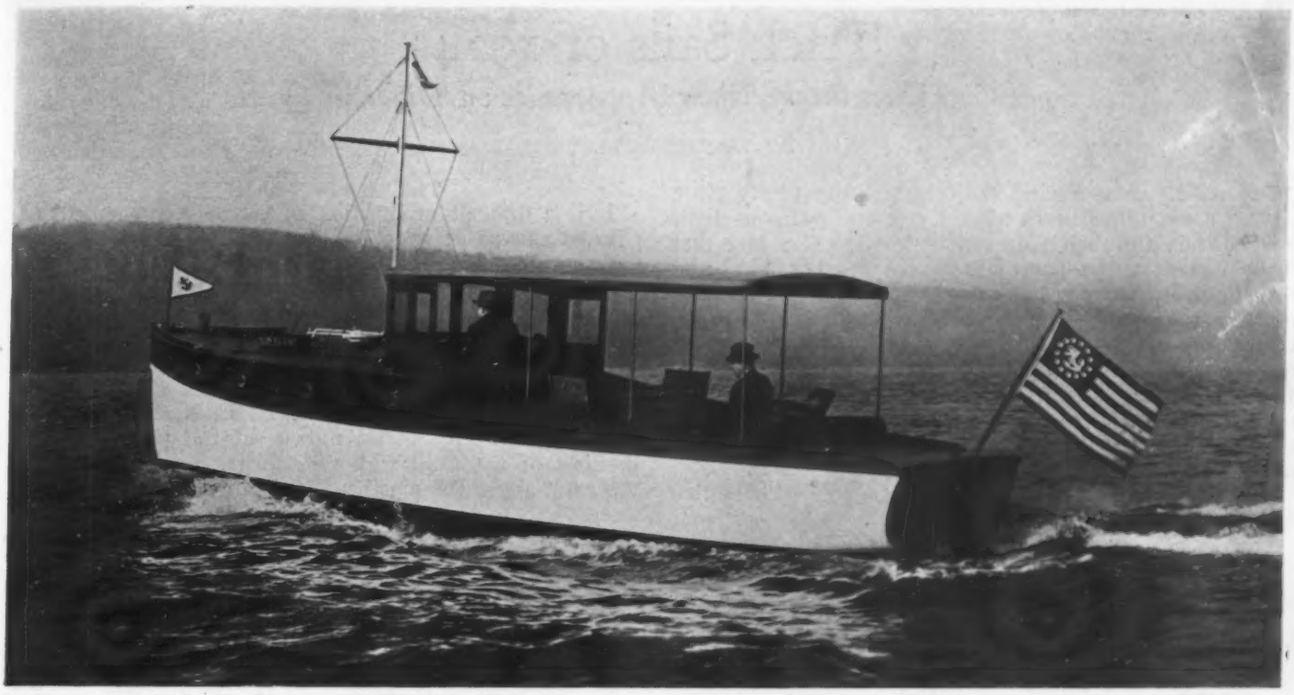
The new boat has a number of features which were not included in the older models. On a length of 35 feet, with 9 feet 3 inches beam and 3 feet 3 inches draft, she is the most complete little boat we have seen for a long time. The cockpit is unusually large and roomy and is protected by a glass windshield at the forward end which makes it comfortable in any kind of weather. There is a large after deck which can be used to fish from, and the cabin is most attractively and comfortably finished. At the after end of the cabin are ice box, stove space and the like, while forward are two 7-foot transoms with backs forming upper berths. Then comes a chiffonier with a large clothes locker on the opposite side and a toilet room forward

The power plant is a 4-cylinder Kermath installed under the cockpit, which gives the boat a speed of better than 11 miles an hour on an all-day run, the consumption of gas being unusually economical.



Large cockpit of *Bayberry*, showing excellent and convenient installation of Kermath 4-cylinder motor.

The cabin, looking forward into lavatory. The backs of transoms swing up and form upper berths at night.



Bayberry, a 35-foot Gordon Cruiser, owned by James T. Stanbury, is an unusually handsome and able little vessel with the room and comfort of many a larger boat.

Cabin of *Bayberry* looking aft and showing the handiness and compactness of the "working end" of this cruiser. The motor is installed behind the companion steps.

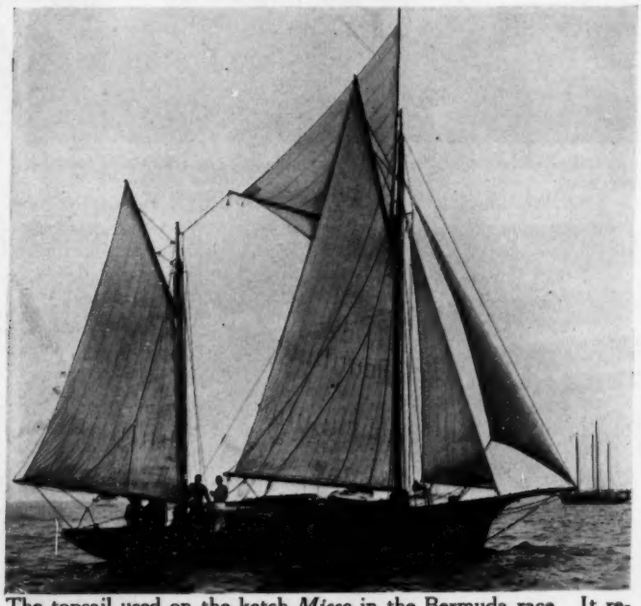
Trick Sails of 1924

Some Odd Kites Make Their Appearance on Different Craft

By Samuel Wetherill

IN recent years racing craft have clung pretty close to conventional lines when it came to swinging light canvas, this being due, doubtless, to the fact that many classes are restricted as to the number, kind and area of sails that may be carried. But with the running of numerous long-distance races, where there were no restrictions as to the shape or quantity of canvas that could be carried, our skippers began to cudgel their brains for newfangled kites with which to jazz up their craft on the long treks, with the result that in 1923 a couple of squaresails, a ringtail and a watersail made their appearance.

But it has been during the past season—1924—that



The topsail used on the ketch *Micco* in the Bermuda race. It resembles somewhat those used on the Chesapeake Bay canoes when racing.

the "trick sail" inventors really got down to business in earnest, with the result that by the end of the season half a dozen tricks had been slipped out of the bag, some being brand-new ones, while others were adaptations of old ones. Let's have a look at some of them.

Memory's "Light Weather Trisail"

All seagoing sailors are familiar with the trisail, or "storm trisail," as it is oftentimes called. But it remained for "Bob" Bavier, skipper of the yawl *Memory*, to invent a "light weather trisail," which he used to great advantage in the last Bermuda Race. This is simply a spare mainsail, cut from very light material, and set free-footed on *Memory's* Marconi mainmast. This fancy sail, being extremely light and "boom-less," was substituted for the heavy working mainsail in very light air when the roll of the sea made the regular mainsail worthless. It worked so well that at one time in the race, in the next thing to a calm, *Memory* caught and passed *Hathor*, worked into a better breeze ahead, and proceeded to go right out and win the race. Both "Bob" Bavier and Sherman Hoyt were convinced that it was largely responsible for *Memory's* fine showing.

The "*Micco* Topsail"

It is a difficult proposition to get an extra spread of efficient canvas between the masts on a ketch or yawl—and there is a big gap there, too. The usual mizzen staysail is of doubtful value, as it is of little use until the wind is pretty well aft, and then it backwinds the mainsail, and still leaves a "hole" above it. It was left to the ketch *Micco* to plug this gap by means of a newfangled topsail which, for want of a better name, we'll call a "*Micco* Topsail," the invention of Mr. H. E. R. Hall, *Micco's* erstwhile owner. As is shown in the photograph, it consists of a topsail with two sprits, one extending up the mast above the masthead, the other sticking out perpendicular to the mast and sheeting to the mizzenmast head. Harry Hall, the owner of *Micco,* says it is a great puller, and certainly it gets area in a spot which has heretofore gone sail-less on ketches and yawls.

A "Standing Lug" on *Sou'wester*

Contestants in the last Bayside-Block Island Auxiliary Race were treated to another innovation in sails when the ketch *Sou'wester* lowered her jib-headed mainsail and hoisted in its place a "standing lug sail" of lightweight

In an endeavor to fill the sailless gap between main and mizzen, a small staysail was set on the permanent backstay on the yawl *Filalonga*. Off the wind it may have been useful.

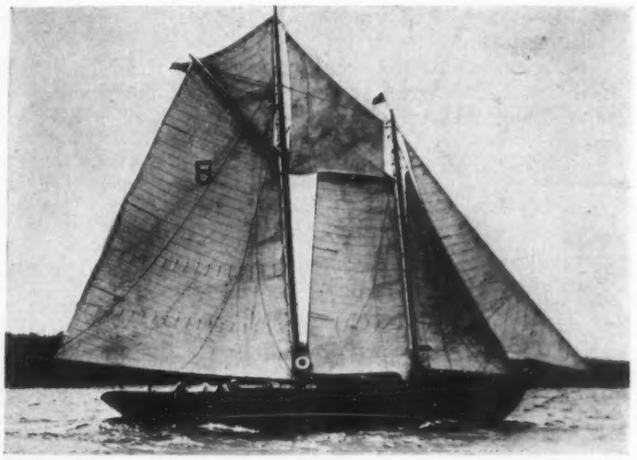
canvas, of much greater area than her working mainsail. The yard is hoisted by a single halliard, and the sail sheeted well aft, either to the lee quarter or to the outboard end of the mizzen boom, the luff being fastened to the mainmast in three or four places by toggles. The "jog" in the luff is necessitated by the lee spreaders. "Billy" Atkin, the inventor of this kite, says it works fine, and that it was carried to advantage with the wind a bit forward of the beam, though the yard had a tendency to sag to leeward. Perhaps a vang from the yard to the head of the mizzenmast would offset this sag, and make the sail extremely valuable in light airs, even when fairly close hauled, besides being undoubtedly efficient when the wind is free.

The "Filly"

Linton Rigg sprung an entirely new one when he appeared at the start of the Block Island Race in his yawl *Filatonga*. Again endeavoring to fill the sail-less gap between main and mizzen, Rigg hoisted a triangular sail on his permanent mainmast backstay, and sheeted it to the mizzenmast head. There being no name for it, Rigg called it the *Filatonga* Sail, which his crew quickly nicknamed "Filly." Off the wind, where it is area which counts most, the "Filly" is undoubtedly useful. With the wind forward of the beam, it would seem that the "push" exerted would be downward, rather than a lifting force, due to the reverse angle of the luff. Even so, it is quite possible that it is a help in light going, where most any shaped canvas, up high, seems beneficial.

A Maintopmast Balloon Jib

"Charley" Mower made the racing sharks on the Larchmont-Indian Harbor cruise sit up and take notice when he equipped Harvey Flint's schooner *Wanderer IX* with a huge balloon jib set from the head of *Wanderer's* Marconi mainmast. It was an immense kite, and seemed to pull like a steam tractor. Whether it is any more efficient than the usual combination of balloon jib and maintopmast staysail is a question which will remain unanswered until such time as some boat tries it out thoroughly



Malabar V's **little "fisherman," for use when on the wind. The clew does not overlap the mainmast and it does not backwind the mainsail.**

in close competition, and compares the results against showings made with the conventional assortment of sails.

Trick Staysails on *Flying Cloud* and *Black Duck*

In the last Bermuda Race neither the *Flying Cloud* nor the *Black Duck* (both schooners) were equipped with balloon staysails. Then, when they were slatting around in a "light weather calm," they had no sail to catch and hold the wind except their fisherman staysails, their foresails being worse than useless under the trying conditions. Thereupon both boats lowered their foresails, rigged extra halliards on their mainmasts, and hoisted, under their "fishermen" and in place of their foresails, light reaching jibs. These held the wind, not having any booms or gaffs to whale them back and forth as the boats rolled. The trick staysail on the *Cloud* worked to such good effect that she managed to overhaul *Fame*, some two miles ahead, *Fame* having passed her a few hours before under the same conditions.

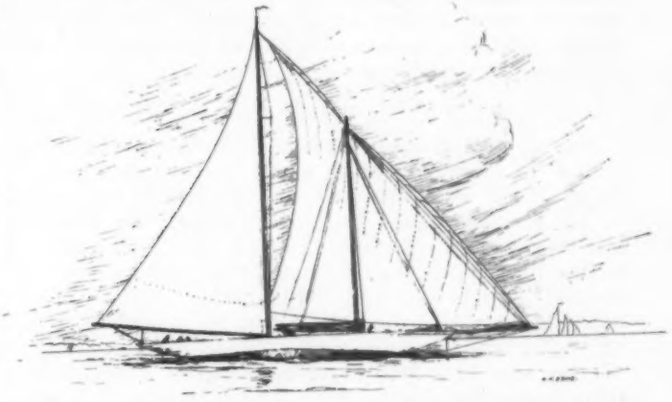
Malabar V's Little Fisherman

John Alden used a small main staysail on *Malabar V*, which, while quite similar to the usual "fisherman," is yet

The "standing lug" of the ketch *Sou'wester*, made of lightweight canvas and used on a reach in place of the jib-headed mainsail.

a bit different. The "little fisherman" is smaller than the usual staysail, the tack being at the gaff jaws, the foot running parallel to the deck, and the clew *not* overlapping the mainmast. It works splendidly going to windward, does not backwind the mainsail, and has more area than the little triangular staysail generally used to windward on schooners, which is sometimes dubbed a "windward staysail." *Malabar IV* used a similar staysail throughout the season of 1923, while the "little fisherman" helped *Malabar V* go through her eight races in 1924 without a defeat. As Alden says, "I carry it on any point of sailing just as long as I can lug it."

Considering the prolific outburst of new sails the past season, it may seem to some as though there were no new sails left to invent. And yet, if long-distance racing, with no restrictions on sails, retains its present popularity a few years longer, who knows but that the agile brains of our zealous skippers will devise even fancier canvas contraptions with which to coax a few more precious seconds out of their hard-pushed craft?



A maintopmast balloon jib of enormous size was used on the schooner *Wanderer IX* in place of foresail and headsails.

Pequot Y. C. Will Build "S" Boats

Announcement has just been made by the Pequot Yacht Club that seven members of that club have placed orders with Geo. Lawley & Son for duplicate boats of the Seawanhaka one-design "S" class.

Report of the Recorder of the Yacht Racing Association of Long Island Sound

An Analysis of the Racing Classes Shows the Imperative Need of New Boats. One-Design and Open Classes Compared

At the autumn meeting of the Yacht Racing Association of Long Island Sound, the strongest racing association on the Atlantic Coast, its Recorder, Mr. W. P. Stephens, read a most comprehensive report of the season's racing, outlining the work of the association and of the recorder. While on the surface it appears that yacht racing is in a most satisfactory condition, an analysis shows that this is not quite the case and that there is crying need for new yachts and new classes on Long Island Sound if the sport is to go ahead, and not retrograde.

Mr. Stephens has been a "first hand" in yachting for so long that his conclusions carry a lot of weight and what he says should be read carefully and given due thought. The report, as far as it deals with this subject, and with other vital matters of interest to yachting generally, follows.

Race Schedule

There are now twenty-nine clubs in the association, including the Hudson Park Y. C. and the Morris Y. C., recently elected; of these, sixteen are desirous of holding championship races. * * *

It would seem that in drawing up the perpetual schedule of dates in 1920, no thought was given to other than the Y. R. A. races. At the present time there are many special events, such as the Bayside Y. C. Auxiliary Race, the Cornfield, Block Island and Stratford Shoals races, the Inter-Club Cruise, etc., in which the yachts of the Y. R. A. racing fleet participate. It would be to the advantage of both clubs and contestants if the dates for these special events could be so co-ordinated with the regular Y. R. A. schedule that at the termination of a Y. R. A. race the fleet would be near the starting point of a special race. It has happened at times that a yacht after finishing off Execution has had to make the trip to Seawanhaka or Indian Harbor, or vice versa, for a start that same evening in a special race. This is but one of the difficulties connected with the planning of a fair and generally satisfactory race schedule.

The Racing Fleet

The season recently closed has been a remarkable one, in that the number of races sailed in the waters between Sandy Hook and Cape Ann by far exceeds the records of all previous years. On the Sound, one club, the Larchmont Y. C., started a total of 1,277 yachts in twenty-three races, and the numerous races about Marblehead brought out very large fleets. At first glance it would seem that the anticipation of a marked revival of yacht racing had been realized, and that the effects of the war had finally passed away. Unfortunately, there is another side to the picture.

Looking first at the nature of the races: At the head of the list are the two ocean races, to Bermuda and Halifax, the "long-distance" races around Long Island, Block Island, Cornfield Lightship, Stratford Shoals, etc., various inter-club and inter-city matches, the Inter-Club Cruise, and similar events. In addition to the regular weekly and holiday races of the Sound clubs, there are the very large number of races now sponsored by many clubs for the development of young yachtswomen and yachtsmen. There is no lack of interest, activity and originality on the part of the clubs, the race committees and independent bodies in providing an extensive and varied program of races which appeal to all classes of yachtsmen and invite all types of yachts.

Looking now at the racing fleet, we find a large collection of craft, ranging downward from the new fisherman type cruisers to the "Flappers," "Midgets," "Mites," "Beasts," and other oddly named and inexpensive units of the Mosquito Fleet Division used by the junior sailors. The need for these various types of craft is obvious, the beneficial results of the ocean and long-distance races are generally recognized, and we look to the coming generation of juniors for those needed recruits to the pleasure navy who alone can counteract the attractions of more modern sports.

At the same time, there can be no continued prosperity for yacht racing without such a large and permanent fleet of first-class racing yachts, as does not exist today on Long Island Sound.

In the report of the recorder for 1922 the racing fleet of the Y. R. A. was summarized in tabular form; the same table, with additions to date, is here given for comparison:

	Total in Class		Started 5 Times		Qualified
	1922	1924	1922	1924	1924
50-Ft. Class	7	5	2	4	—
40-ft. Class	8	6	4	6	5
30-Ft. Class	12	13	6	11	8
Larchmont Class O	6	3	5	3	2
% Handicap Class—					
Yawl and Schooner Div.	7	Dead	3	—	—
Division 1	11	6	5	5	—
Division 2	8	2	2	1	—
Division 3	8	3	5	3	—
Division 4	6	5	—	5	—
Sound Schooner Class	6	5	2	5	4
Class U	6	5	4	5	3
*Indian Harbor Arrow	6	Dead	5	—	—
Pequot Class R	4	Dead	—	—	—
6-Metre Class	14	18	10	15	2
Victory Class	12	10	8	9	7
Jewel Class	6	2	4	2	—
Southampton Class	2	Dead	2	—	—
Star Class	42	60	24	35	5
Orienta O—D Class	4	Dead	—	—	—
New Rochelle O—D Class.	2	Dead	—	—	—
New York Canoe Club	6	Dead	—	—	—
*Indian Harbor O—D	7	Dead	2	—	—
*Stamford O—D	8	5	4	—	—
*Shell Island Dories	10	Dead	—	—	—
Decked Canoe Class	11	Dead	2	—	—

*Class still racing locally.

Taking up briefly these classes in detail, the 50-Ft. Class this year has numbered four yachts in the regular Y. R. A. races, none sailing the fourteen races necessary to qualify; one is now for sale. The 40-Ft. Class has numbered six yachts, racing regularly through the season, all but one qualifying; one has recently changed hands, but the class is likely to continue unchanged next year. The 30-Ft. Class numbers thirteen yachts; eleven have started regularly and eight have qualified; one has been sold away from the Sound, one has been brought back, one has been for sale, but at a good price; one has recently been sold and will continue in the racing; and

one, long out of the racing, may come back. This class, now ending its twentieth season, is today the backbone of the Y. R. A. racing fleet, but it is not to be expected that it will stand the physical strain of many more years' racing.

Class P was revived on the Sound in 1923 with nominally six yachts and a fair prospect of permanence, but it mustered only one lone boat this year and is dead beyond immediate resuscitation.

In the Handicap Class, the yawl and schooner division was abandoned last year, having failed to bring out entries. Only six yachts started in Division 1, and one of these was wrecked in the middle of the season. Division 2, once fairly strong, started the season with two boats, both new to it, and ended with one. Division 3, made up of the old raceabouts, numbered three boats, competing regularly. Division 4 had a total of five boats racing more or less regularly in the middle and latter part of the season. This season there came out a new local handicap class, fostered by the Huguenot Y. C., numbering in all ten yachts and starting an average of five or six in a number of races. The handicap was arbitrary, arranged by the Huguenot Yacht Club, and under it, *Amoret*, the lone yacht of Class P, at times allowed over an hour to a small catboat. Considering the great disparity in type and size within this class, it would seem that the yachts would be much better placed in one or another of the four divisions of the Per Cent Handicap Class, where each might be more evenly matched with boats of more nearly its own type and size.

The Sound Schooner Class numbers six yachts, of which one has not raced this season, four qualified, and four or five may be counted on for next year. Class U numbered five yachts, of which three qualified; these old *Sonderboats* are showing their age, but they seem seaworthy and they appeal to racing yachtsmen; there are several more of the class which might be raced, and as long as they hold together they make a good racing class. The Pequot Class R, originally with four boats, is dead. The Arrow Class, the Indian Harbor One-Design and the Stamford One-Design classes no longer exist as definitely organized classes. Most of the boats have been sold by their original owners; they change hands frequently and those which still race do so as individuals, rather than as members of a class.

The Six-Metre Class is now strongly established on the Sound, with eighteen yachts, and it is interesting to note that this alien class, built under a foreign rule, is the only rule class now racing in the Y. R. A. Owing to numerous special races, the trial races and the international match, only two of the class qualified for the championship, but it promises to be the strongest of the racing classes in 1925. Allowing for the lack of thorough development on the part of the new boats, and the irregular manner in which some of the older ones were raced, it may be said that in this class, at least, there is, after four seasons of building and racing, no one boat so unquestionably superior as to make it useless to start against her.

Class S, though nominally a Rule Class, has never been more than a local one-design class fostered by one club, only a few of the yachts starting in the open Y. R. A. races. In view of the number of these boats now on the Sound, the favor which they have met with from those who own them, and the need of a new class to take the place of the old raceabouts, it would seem that the class is specially worthy of encouragement as an open rule class for championship as well as local racing.

The Victory Class, starting in 1920 with twenty yachts on the Sound, now musters ten in actual racing, nine racing regularly and seven qualifying. There is still a disposition to "sell foreign," regardless of the future of the class, but the very able class organization which has functioned from the start is working to counteract this movement and to keep the class together.

The Star Class is a striking example of what may be accomplished by an active and vigorous class organization, the fleet growing in numbers year by year, the racing being keen in proportion, and the boats holding their sale value. The Star Fleet on the Sound this year numbered about sixty boats.

The table shows an actual decrease in the racing fleet, which is to be regretted, and is also rather surprising, as reports would indicate that there has been an increase in the interest in yachting generally. There are evidences of a regular, and in some cases rapid, disintegration of racing classes; the rule classes have already disappeared, and the one-design classes are in many instances following them. For this condition there are but two possible remedies; the rehabilitation of existing classes and the construction of new yachts.

Looking first at the existing classes, all one-design, it is obvious that if the racing of other than out-classed racers, cruising yachts and the kindergarten classes is to continue on Long Island Sound, every possible means must be employed for the conservation and restoration of existing classes. The fact cannot be too strongly emphasized that the market value of every one-design yacht is dependent entirely on its position as an active member of a live racing class, and that this value decreases as soon as the yacht becomes an isolated unit. While a yacht in active racing may bring a price based on her class association, once she is separated from the class this value lessens. The life of the class as a whole, and consequently the value of every individual yacht, depends on the class organization and the activities of the class officers. For the immediate present the need is for such action on the part of owners of existing yachts as will establish or maintain live class organizations, with interested and energetic officers who will, as far as possible, keep the class together. This applies especially to the 50-Ft., 40-Ft., Larchmont Class O, Sound Schooner and U Classes; the 30-Ft., Victory and Star Classes being at present well cared for in this way, as their numbers prove. The following table may be of interest as showing the original cost, lowest sale price and approximate sale value today of some of the leading one-design classes:

	Date	No. Built	Cost	Lowest Sale	Present Value (Approx.)	No. Now Racing
50-Ft. Class...	1913	9	$16,000	$5,500	$10,000	4
40-Ft. Class ...	1916	12	12 000	3,500	10,000	6
30-Ft. Class ...	1905	18	4,000	1,300	3,500	11
Larchmont Class O	1917	6	12,000	5,000	6,500	3
Sound Schooner Class	1912	8	1,500	1,200	1,800	5
Victory Class..	1920	20	2,600	1,100	1,800	9
Star Class	1911	?	250	——	850 New 450 Old	50
Glen Cove Jewel Class	1910	13	1,000	200	450	2
Arrow Class ..	1916	7	1,200	500	900	2
Indian Harbor Class	1904	10	800	300	500	4
Stamford O-D Class	1912	10	900	550	850	44
Class S	1920	30	2,675 3,250	1,800	2,700	14
S. C. Y. C. Fish Class	——	27	975 1,125	600	1,100	19

Many of the smaller one-design classes have been failures from the start for the reason that the nominal limit

(*Continued on page* 88)

Yachting

Herbert L. Stone, Editor

Samuel Wetherill, Associate Editor

Editorial

Uphold the Authority of One-Design Associations

THAT yacht racing has "come back" so strongly since the war is largely due to the one-design classes. Probably ninety per cent of the racing fleet on the Atlantic Coast is made up of one-design classes, and in lesser measure this holds true on the Great Lakes. There may be differences of opinion as to whether this is or is not for the best, and whether one-design or class racing makes for the most lasting good of the sport. But as things stand today, racing in boats of one-design is about all we have and all we can look for in the near future. An article elsewhere in this issue, by the recorder of the Yacht Racing Association of Long Island Sound, shows what the one-design class associations have done for the sport, and points out that *strong* class organizations have not only kept racing alive, but have kept up the values of the boats themselves. A glance at the Star Class, the N. Y. Y. C. 30-foot Class and the Victory Class is enough to show what live class organizations can accomplish.

Yet, in spite of this, there seems to be in some quarters a conflict between class organizations and yacht clubs. In the first place, it is the duty of a class organization to get the class together, to keep it together and to form such rules regarding equipment and the like as will make the boats uniform in every respect. It is not the duty of the class to conduct races, except such special events as the class may run with its own officers. The one-design class associations do not take the place of yacht clubs and never have tried to.

In this connection, yacht clubs and yacht racing associations frequently do not uphold the class officers as they should. Where there is a class organization, everyone who owns a boat in that class should become a member of the association, and yacht clubs should not accept entries in those classes except from class members. It is only in this way that the rules of the class can be enforced. Yet often this is not done, in spite of the fact that most racing circulars state that in one-design classes the class rules of that association will govern. Certainly yacht clubs are not going to see to it that class rules are observed. The only way the class associations have of enforcing their class rules is in having boat owners become members of the association. This gives the class officers some jurisdiction. In most cases every owner feels the necessity of joining the association and paying the purely nominal dues. But in some of the classes that have a great many boats this is not the case, and owners feel that as long as they own a boat in that class they are entitled to race whether or not they live up to the rules regarding equipment, periods for hauling out, etc.

Protests

We are getting requests constantly for interpretations of certain racing rules, or for rulings on situations that occur in yacht races in which protests have been made, or have not been made because those involved in them were not familiar enough with the rules to justify them in protesting intelligently. This brings up the matter of frequent failure of skippers to protest at violations of the racing rules, particularly those of right of way. This is sometimes due to a mistaken belief that it is unsportsmanlike to protest a violation of the rules unless one is convinced that it is deliberate, but is more frequently due to a lack of knowledge of the rules by those who believe a protest justified and yet do not know on what grounds to make it.

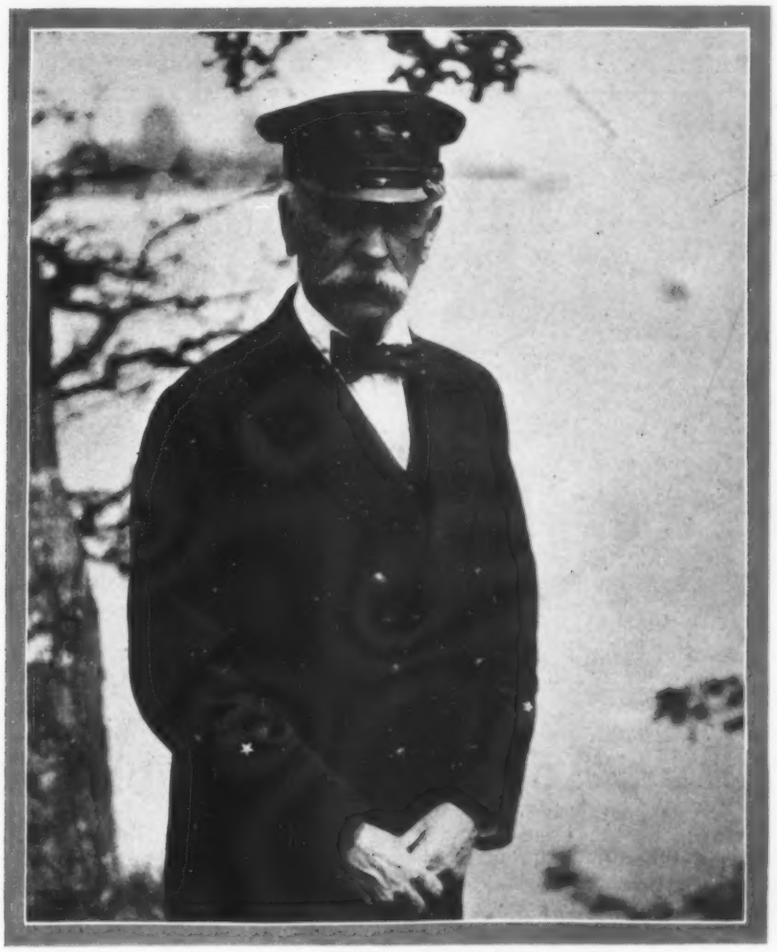
In regard to the first cause, one should not hesitate to protest on the grounds of sportsmanship. Any infraction of the rules in a race should be reported. It may have a bearing on some contestant in the race and it may not, but if the rules are not lived up to scrupulously, and if slight infractions are overlooked, skippers become careless and the racing soon degenerates into a free-for-all scramble and abuses are bound to creep in. As there is neither umpire nor referee in a yacht race, and as the contestants are out of sight of the race committee during most of the race, those sailing it should feel all the more the need of scrupulously living up to the letter of the law, and reporting those who do not.

Do Not Professionalize Racing

It seems a pity that some of those who have done so much for the promotion of power boat racing feel that it is necessary to place it on a purely professional basis in order to make it interesting. Yet this is what is to be done at Miami this winter, when a lot of professional automobile drivers are to be imported from the West Coast to take part in a series of professional power boat races for cash prizes amounting to $10,000. For the first time we will be putting the sport on a par with six-day bicycle races or prize fights, or professional ball, where the sport is to become a spectacle for yachtsmen to watch rather than to participate in. We believe this to be a mistake. To our way of thinking, boat racing, both power and sail, has been the one sport not commercialized and in which the greatest pleasure came in the participation and not in looking at a lot of hired men perform. Maybe we are wrong. Perhaps our viewpoint is old-fashioned. But the minute a sport is turned over to the professional it means the end of it for those who play for the love of the game.

The promoter's excuse is that racing power boat owners won't race during the winter in Florida, that they want their Florida visit to be a vacation. Also, that no two boats are ever equal in speed and the racing is thus uninteresting. We can dismiss the first reason. The second could be overcome by just such a fine little one-design class as has been provided for these professional automobile drivers. With such fine boats, reliable power, good speed, and with the same rules to govern as are contemplated at Miami, there'd be no trouble getting ten amateur drivers to compete in the series. Just ask them, and see What power boat men want is sport, not a spectacle.

In the World of Yachting

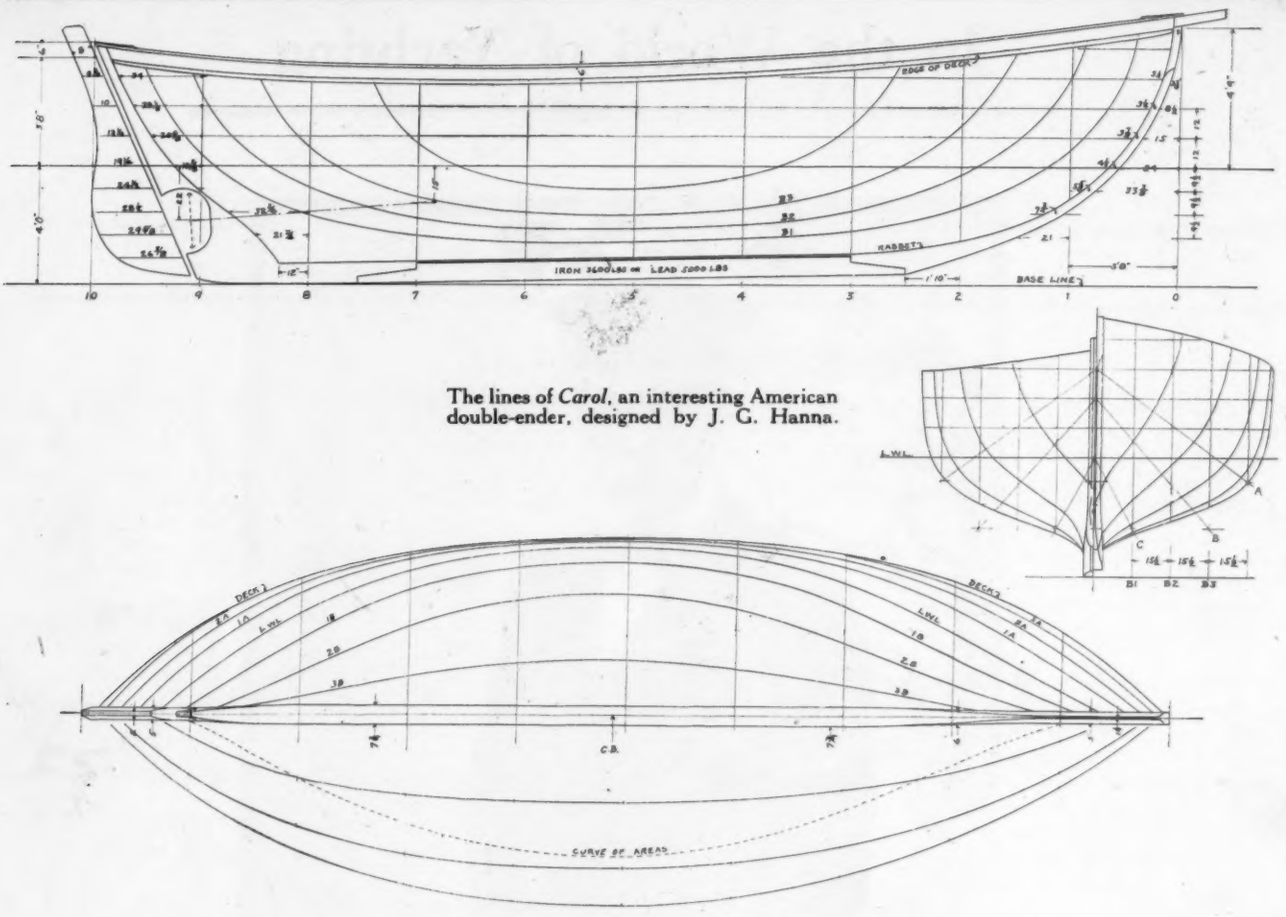


RALPH ELLIS

COMMODORE RALPH ELLIS has been sailing racing yachts, and sailing them successfully, for so many years that it is difficult to remember when his name did not appear in the racing records of any yachting season on Long Island Sound. For nearly forty years yachting has been his favorite pastime. He has owned and sailed large yachts and small ones, and seems to get as much, or more, enjoyment out of the little fellows as out of the large racing yachts he has owned and sailed.

Early in his yachting career he sailed the Cary Smith schooner "Iroquois," one of the finest yachts that ever came from the board of this master-designer of schooners. When the famous Newport 30-footers came out in 1896, furnishing the best of racing off Newport, he owned the "Hera" in that class, and when the New York Yacht Club "Thirties" were going strong in 1908, he purchased the "Neola II" and named her "Hera II." Later he owned the "Caprice" and sailed her in that class. When the "Fifties" came out, he owned the "Iroquois II" and was at her helm for many years. Lately he has owned and sailed one of the Seawanhaka One-Design S Class, the "Ellen."

Since 1882 he has been a member of the New York Yacht Club and was at one time its Rear Commodore. He now does most of his sailing from the Seawanhaka-Corinthian Yacht Club and for several years was its Commodore.

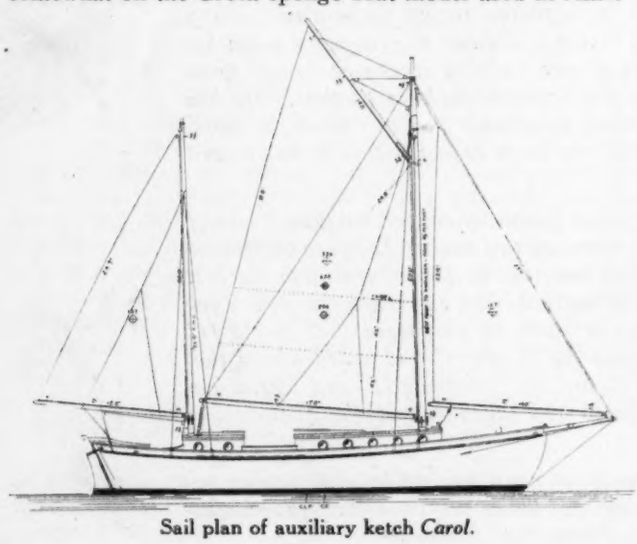


The lines of *Carol*, an interesting American double-ender, designed by J. G. Hanna.

Carol—An American Double-Ender

By JOHN G. HANNA

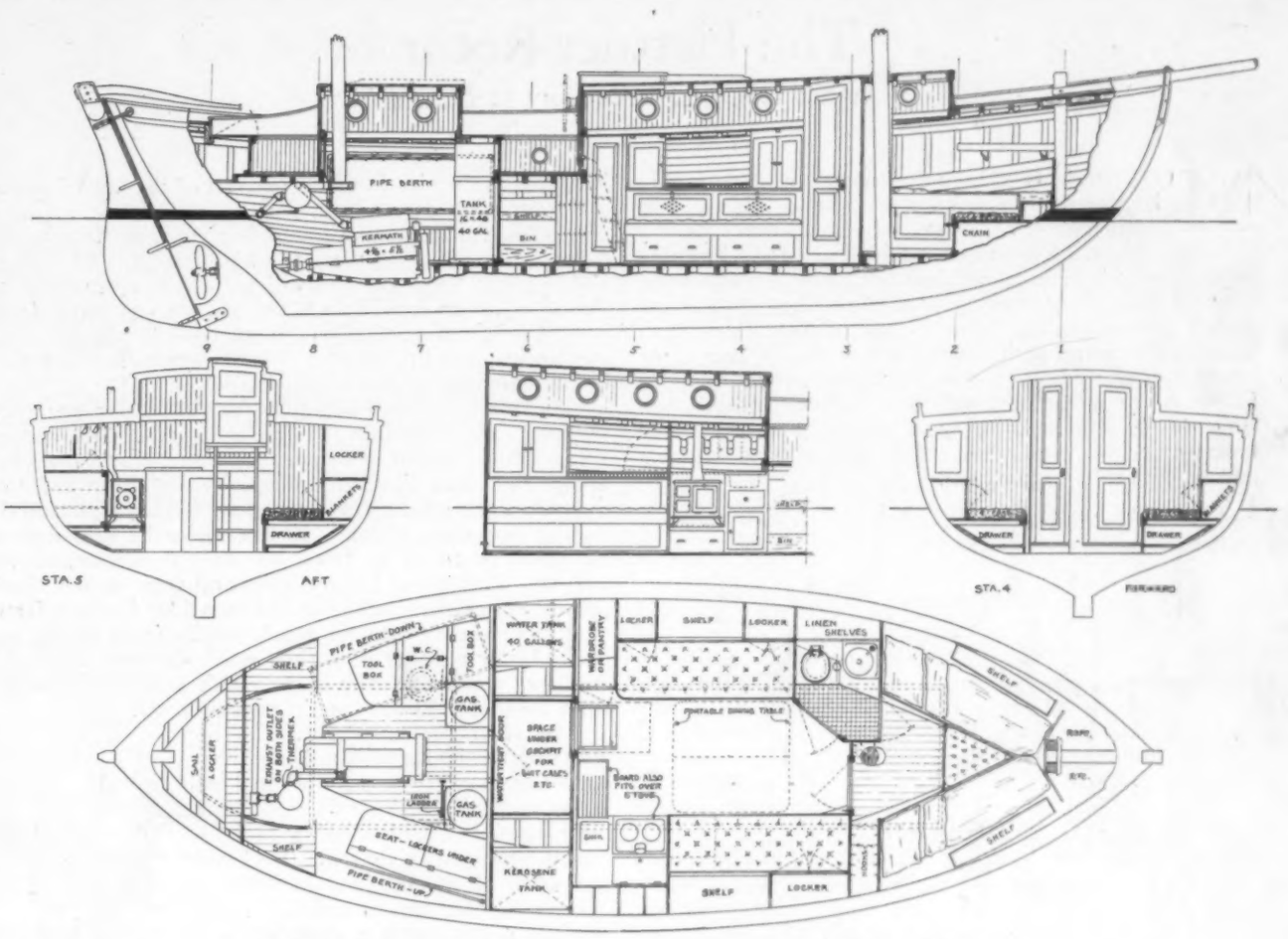
I WOULD call this boat an American double-ender for a variety of reasons. She was designed by an American, for an American, and expressly adapted for certain peculiar needs of use within and around the American continent. She is being built in the heart of America, on Lake Michigan. She derives some of her characteristics from a boat which, while built by a Greek somewhat on the Greek sponge boat model used in American waters, was considerably modified to fit the ideas of her owner, an American fisherman, who quite likely got his ideas of what a double-ender should be from the whaleboat, Block Islander, Chebacco boat, pinky, and other famous American double-ender types. And finally I call her American in distinction from the Scandinavian models of all kinds which seem to be very much in the public eye at this time.



Sail plan of auxiliary ketch *Carol*.

When Mr. E. L. Springer, of Michigan, asked me to design a double-ender cruiser for him, he presented a list of requirements that certainly demanded an "all-around" boat. It is his intention to make a cruise down the Mississippi to the Gulf, around Florida, up the Atlantic coast, and home by the St. Lawrence River and the Lakes. Nowhere else in the world, probably, can one take a round-trip cruise of such length and such infinite variety, if we exclude those requiring trans-oceanic voyaging. A boat to be satisfactory for this cruise must combine characteristics to meet very diverse conditions.

For river use it seems to me that the double-ender, though known only as a rough-weather, open-sea type, has much to recommend it. The very great amount of room below and on deck gives all the cruising comfort of a houseboat. I believe few 36-foot motor boats of conventional form have as much accommodation—headroom, foot-room and elbow-room—as *Carol*. It is for the part of the cruise that will be in river and canal that Mr. Springer specified a steering wheel in a midship cockpit. Such an arrangement is almost essential to give the helms-



The cabin plan shows a well laid-out interior and an honest-to-goodness engine room.

man a clear view when picking river channels. A small steering cockpit aft is provided for use with tiller when under sail. If the boat were intended exclusively for offshore use one would, of course, prefer a flush deck in place of the midship cockpit, and a larger cockpit aft. The midship cockpit can hardly be called a danger when offshore, however, as it is small and self-bailing.

As a sailing vessel, the draft will seem light to those accustomed to conventional yachts with cutaway keels. Naturally, a short keel has to extend deeper than a long one to get equal area of lateral plane. It is unwise to give a long keel boat as great draft as the short keel type, for that would make her difficult to maneuver. The draft of 4 feet with the long keel should give *Carol* all the windward ability to be expected of a full-powered auxiliary cruiser. More would be a handicap in inland and Florida cruising, a detriment to comfort in deep water and of little benefit at any time to a boat that will never be expected to compete with racing yachts to windward.

The ketch rig is moderate and well suited to the owner's home waters. On Lake Michigan you get either a lot of wind or almost none, and so a big spread of canvas is either too much or not enough. However, the form of the boat is powerful enough to carry all the canvas one wants in a cutter rig, especially with lead instead of iron on the keel.

That brings up the question of lines. I believe you cannot make the midsection of a double-ender too stiff, because that is all the stiffness she has. She has not the long quarter to lean on that you can get in a square stern model. It will be noted that this fulness of the midsection extends forward and aft to a noticeable extent. In this I followed the lines of *Seaward*. This characteristic, giving her much better sail-carrying ability than most of the Greek boats, was one reason why I purchased my little ketch. It is interesting to note that *Leiv Eiriksson* has exactly the same characteristic, to the great satisfaction of her owner.

The kind of double-ender that is "two ends with no ship between them," has its uses, no doubt, but comfortable cruising is not one of them. Yet this fulness amidship does not necessarily require the blunt ends of the Nordic type. *Carol's* ends are not as fine as those of a fashionable American yacht, but they are obviously finer than those of *Leiv Eiriksson* or *Eric*. Much finer than those of the Greek double-enders. As fine as *Seaward's*. Not as fine as the whaleboat. Too fine ends make a wet ship. To help keep her dry I gave the sections good flare above water.

Mr. Springer's cabin requirements called for a separate engine room closed off from the rest of the boat—a real engine room you can stand up in, not a lazarette hole. Forward he wished accommodations for himself and his wife and another couple, arranged for a reasonable amount of privacy at night. After studying many sketches, we decided that the cabin plan of *Orca*, suitably enlarged, would give the best utilization of space. At first glance it looks as if this 36-footer has more cabin room than the 42-foot *Leiv Eiriksson*, but this does not mean she has a more tubby hull. The secret is simple: *Carol* is built according to very substantial American standards, but not according to log cabin architecture. 8½" x 10" frames, 2" planking, 1½" ceiling, decks in three layers totalling 4" thick—all

(*Continued on page* 82)

The Flettner Rotor

What It Does, and Why It Does It

By Weston Martyr

MOST students of aero-dynamics have been familiar, for the last seventy years or so, with a little phenomenon of nature which is known as the "Magnus Effect." They regarded it merely as an interesting piece of scientific knowledge, and, until recently, none of them thought of turning that knowledge to practical use. A few months ago, however, one of them did, at last, have a brain wave, with the result that the Flettner rotor has been produced. This rotor has already been successfully used to propel a vessel; and I imagine that before long we shall be securing most of the power we need from rotor-mills, discarding steam and internal combustion engines to a large extent.

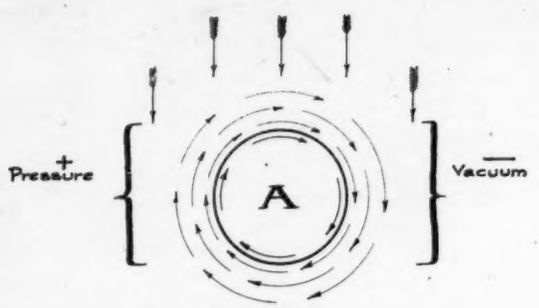


FIG. 1.

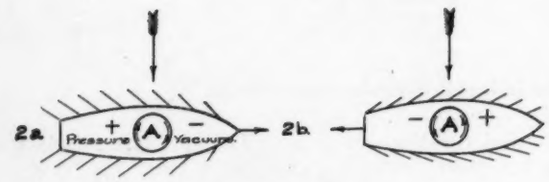


FIG. 2.

If you will take the trouble to produce the Magnus Effect yourself, I think you will agree with me that it is not surprising that its enormous potentialities have been overlooked for so long, for, in appearance, the Magnus Effect is a very innocent looking affair indeed. It is a simple matter to produce the Magnus Effect in the home. All you need is an empty tomato can and about 8 feet of stout cord. Make a small hole in the center of the bottom of the can and thread the cord through it. Tie a big knot in that end and plug the can tightly with paper, thus jamming the knot and preventing it from turning in the hole. Tie the other end of the cord to a lamp bracket, preferably in the middle of the room, and then revolve the can until the cord has a good number of turns in it, so that it will unwind as soon as you let go, thus causing the can to rotate rapidly. Make the can swing freely, like a pendulum, and you then have a spinning cylinder moving through the air. Stand at one end of the line of swing and watch the can, which, we will assume, is spinning clockwise. As it passes through the air towards you, the can will be forced to the left of its true line of swing; and, further, the lower end will be forced outwards more than the upper end. When the can swings away from you, it will be forced across to the right by the air. The air flowing past the *rotating* cylinder produces this action which is known as the Magnus Effect.

And that is all there was to it—until Flettner saw more behind. What he saw led him to take a three-masted schooner (of about 400 tons) and strip her of all her spars, sails and rigging. In their place he erected two smooth, light steel cylinders about 60 feet high and 10 feet in diameter. Using a 10 h.p. motor he caused these cylinders to rotate at from 100 to 120 revolutions per minute. This vessel has made several trips on the North Sea in all weathers, and she has been found to sail faster and more closely into the wind, handle more easily, and make better weather of it than when she was fitted with ordinary sails. She does all this with a smaller crew and with about a 50% decrease in running costs.

The surface area presented to the wind by the two cylinders is considerably less than the vessel's original sail area, and it is difficult to understand why the small cylindrical area is so much more effective than the larger sail area. It is necessary to resort to the use of diagrams to make this clear.

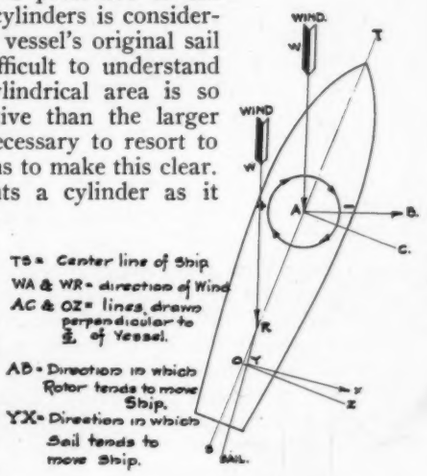


FIG. 3.

Fig. 1 represents a cylinder as it would appear when looking at it from above. "A" is the cylinder, rotating rapidly, clockwise. As it rotates it carries round with it a jacket of air, represented by the small arrows. The three large arrows represent a wind blowing from the north. This north wind cannot blow home onto the surface of the cylinders because the revolving jacket of air prevents it from doing so. The north wind on the left meets a current running *against* it and becomes banked up and densified, with the result that an area of *pressure* is produced on the left side of "A." On the right side of "A" exactly the opposite conditions prevail. Here the north wind joins a current of air which carries it ahead faster

(*Continued on page* 90)

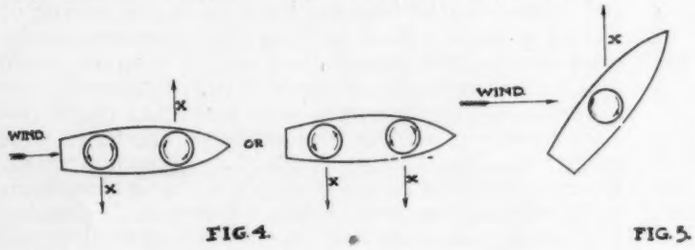


FIG. 4.

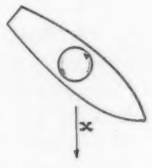


FIG. 5.

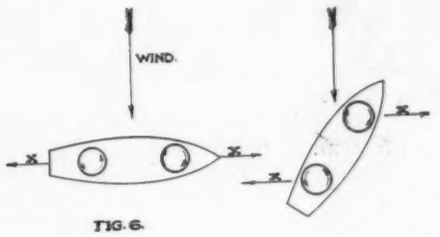
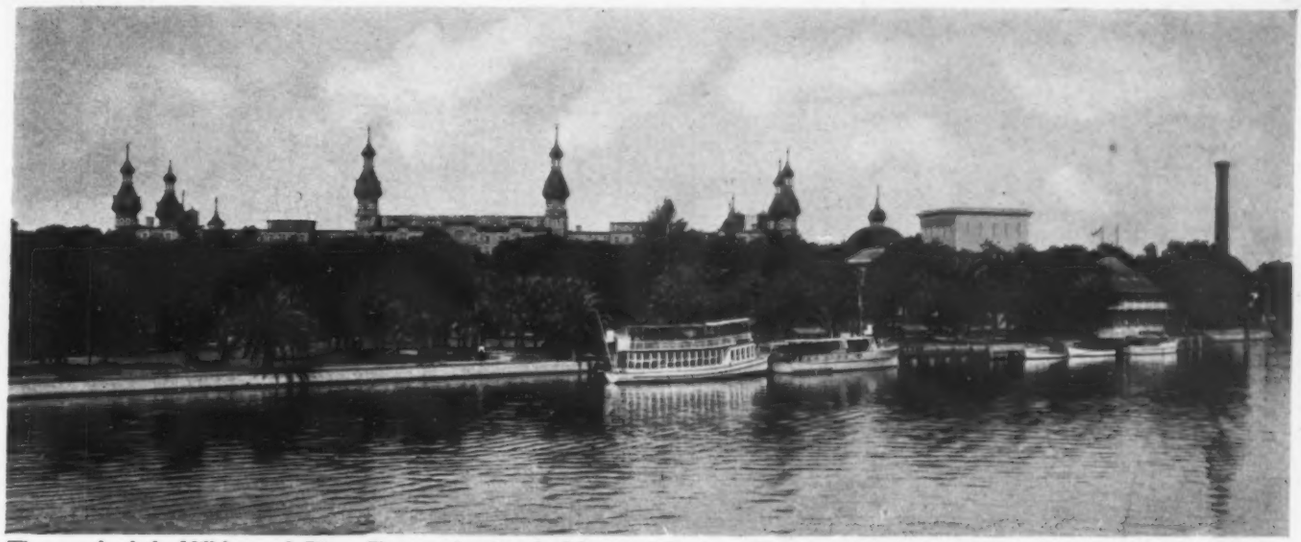


FIG. 6.



The mouth of the Hillsborough River, Tampa, showing the Municipal Docks. There will be a lot of motor boat activity here this winter.

Power Boat Racing at Tampa

TAMPA, Florida, and those interested in Tampa's development, will make a strong bid for the Northern boat owner to make this city and the adjacent waters his headquarters during the coming winter. Mr. D. P. Davis, of Davis Islands, Tampa, through his recent purchase of five Belle Isle Bearcats, has started the nucleus of a fine fleet of runabouts that probably cannot be equalled anywhere in the South. These boats are capable of better than 45 miles an hour and it is the intention of the Hillsborough Yacht Club, under whose auspices the regattas will be run, to stage a series of races throughout the winter, ending with a big regatta during the early part of March, sandwiched in between the Palm Beach Regatta and the Miami Water Carnival.

Facilities for taking care of boats at Tampa probably are better than at any place along the West coast, with the added advantage that the boat owner has fresh water for storage and protective waters for both runabouts and cruisers, in addition to the open bay and gulf.

Nowhere in the South is there better fishing than can be found between St. Petersburg and Sarasota, both within a short run from Tampa. There are many other attractions for the yachtsman in addition to the magnificent waterways, including three 18-hole golf courses, horseback riding, motoring over miles of paved roads, visits to immense orange and grape fruit groves, and, in the Spring, big league baseball played by the Washington Senators, whose training camp is at Tampa.

The fleet of boats that Mr. Davis has purchased is only the starter towards a much larger fleet that will soon be owned in Tampa waters, and the Northern yachtsman interested in boating, or in watching the speed contests of others, can spend a very pleasant winter in this fascinating region where real cold never has intruded—and probably never will.

The Rochester Yacht Club Challenges for Fisher Cup

THE Rochester Yacht Club has seen a big revival of sailing and yachting this last year. It has acquired during the past year two Class P yachts and several Class R racers and it looks as if next summer it would have a fleet of five or six of the latter class.

They have challenged the Royal Canadian Yacht Club, of Toronto, for a race next summer for the famous Fisher Cup, which has not been sailed for on Lake Ontario in many years. The challenge is for existing boats in Class P. It is probable that the Royal Canadian Yacht Club will accommodate the Rochester sailors, and this means that an important international race will be sailed on Lake Ontario next summer.

There is also an effort being made to revive the Canada's Cup and to hold a race for this famous trophy, if the Canadians will challenge. It has been many years since an unfortunate controversy killed racing for this trophy, but it seems as if the time were ripe to let bygones be bygones and to dust off the famous mug.

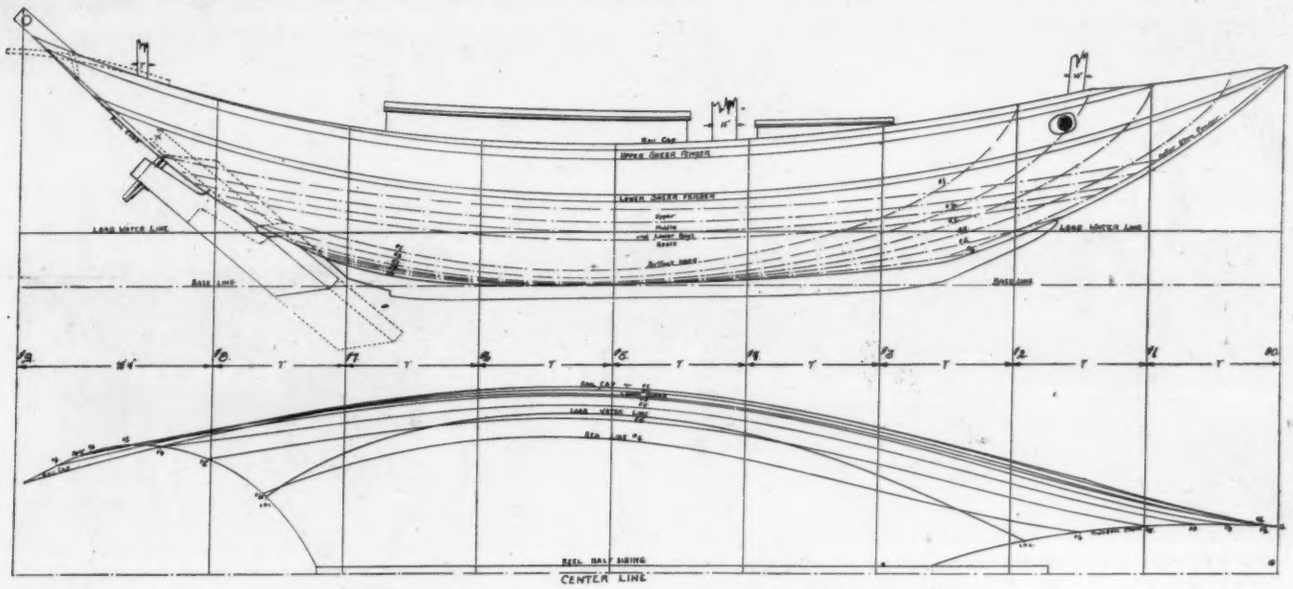
Professional Drivers to Race at Miami Regatta

TEN automobile speedway drivers are going to try their hands at the wheels of speeding power boats in the annual mid-winter regatta of the Biscayne Bay Yacht Club, at Miami Beach, March 20-21. In automobile racing they now drive one-man cars, with engines not to exceed 122 cubic inches piston displacement, at the rate of 125 miles an hour. These same drivers will race in a new class of runabouts with Scripps F-6 engines, of 335 cubic inches, and will handle them alone in the six 12-mile heats on the two days. In the trials of the little boats they have shown speeds of 42 miles, without the engines being tuned up.

These boats have been designed and built by the Purdy Boat Works, Trenton, Mich. They are 18-foot runabouts, 5½ feet wide, equipped with outboard rudders, and are very seaworthy little craft that can battle a chop as well as run on smooth water. In all the trials none have been turned over.

The idea of the race, and of the boats themselves, originated with Carl G. Fisher, the promoter of the Indianapolis Motor Speedway and its 500-mile international sweepstakes races. He has financed the building of the boats and is also putting up $10,000 in cash prizes.

This being the first race for this one-design class, the race committee and Mr. Fisher decided that entries should be by invitation, and confined to not more than 10 boats. Among the drivers invited to compete are: Barney Oldfield, Ralph De Palma, Tommy Milton, Earl P. Cooper, Bennett Hill. Harry Hartz and R. Clifford Durant.



Lines of the Chinese junk *Amoy*, as taken off by A. E. Doane, N.A.

Lines of the Chinese Junk *Amoy*—a Study in Form

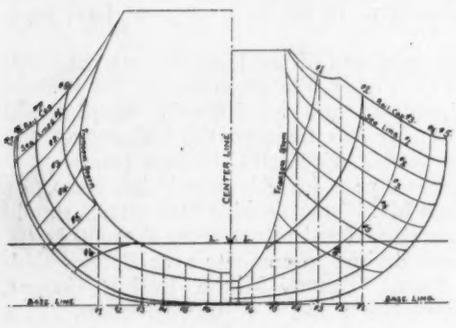
By Arthur E. Doane, N.A.

BECAUSE there are so many different types of hull forms in the world, many of which are known in a general way only, it seems as if a study of one of the oldest and most successful of these in existence would be enlightening as well as decidedly valuable. I refer to the native craft of China, known as the junk, and will use the well-known *Amoy* as an example.

No doubt Mr. Alfred Nilson's article in the July number of YACHTING will be remembered for the interesting manner in which the unusual characteristics of the *Amoy* were explained and how the junk was built and sailed from China by Captain Waard. Her last port was Bridgeport, Connecticut, where she took the eye of Mr. Leroy Lewis of Stratford, who bought her recently.

Upon learning of her whereabouts, I drove over to see this strange craft. She was on the ways, and Mr. Lewis was anxious to have her hull lines taken off before she went overboard again. Upon the completion of these lines a number of unusual points of her hull form were revealed which could not clearly be seen by a glance at the actual hull and it seemed to me that many yachtsmen throughout the country would appreciate the publication of her lines as well as technically based reasons regarding the whys of her performance.

I shall never forget that brisk fall day with the *Amoy* out on Long Island Sound in a spirited brush with a typical racing yacht of American design. Although the wind was abeam and blowing stiff, the junk stood almost straight and seemed to be lazily floating along, while the big sloop was bent down to her lee rail, apparently straining every nerve, although both were making about the same speed. So as to determine the exact reasons for her performance I have made a series of technical computations, the results of which follow.



The body plan of the Chinese junk *Amoy*.

Because of her pronounced sheer curves the rail cap has been used as a base line and curved planes cut the hull every twelve inches below this. For want of a better name these are called "sea lines," as they show more nearly the form under sea conditions. Their comparison with the shape of the load water line on the half breadths makes this clearer. These sea lines strongly bring out one of the features characteristic of a junk, namely, the curve of her top sides, which are nearly uniform for her entire length, and which is further emphasized by the cross sections which show a very easy but continuous curve from bottom to rail cap.

To those experienced with the principles of modern hull form it will be apparent that the Chinese have met the problems presented by the sea from almost the opposite methods that we usually employ. For instance, to combine stability and easy motion we choose an amidship section of considerable depth and deadrise with ballast at a low point, but with little effective overhang. On the other hand, the junk is shallow bodied and perfectly flat for a considerable area, centering just aft of amidships. From this bottom the turn is quick, followed by a curve which is so slack that it can hardly be called a bilge at all. It continues outward, however, until the sheer is reached and then it is sharper, ending with a slight tumble home at the rail cap. Thus we rely on depth with a low center of gravity, while the Chinese use flatness and extreme beam in connection with a weak bilge, to produce a proper metacentric height.

The longitudinal stability as expressed by the fore and aft lines is also worthy of study. The forward portions of both the buttock and sea lines are naturally controlled by the flat stem, which results in hollow sea lines and

La Liberdade, a boat built by Captain Slocum, in which he and his family sailed from Brazil to New York after the loss of his bark. This shows what Captain Slocum thought of the junk rig.

steeper buttocks than would be the case with a pointed stem. The evident purpose of this form is to insure the bow against cutting through and under the seas. Of course it represents a certain retarding influence, the vertical projected area of the stem being 44.2 sq. ft., but the 80 sq. ft. of the actual stem taken on an angle of such easy inclination produces an immediate lifting effect adequately proportioned to the total hull. At the same time the angles and areas are so worked out that very little pounding or slapping results.

As to the run aft, this is decidedly straight and meets the stern well down. This is usually considered an eddy-making factor, causing drag, but the relative area of the stern in comparison with the total displacement of 24 tons, with its attendant driving effort, does not represent a serious retarding influence. On the other hand, this displacement aft opposes the tendency to pitch and toss about. The *Amoy* is also provided with stern pockets which fill with water and are intended to snub the longitudinal motion. At best, however, these cannot hold over half a ton of water, and then only for an instant, and considering the boat's relation to the sea at that time, I am unable to see how it can produce any desirable force, nor do calculations vindicate it. However, I understand that the majority of junks do not include these stern pockets. The remainder of the stern above these pockets is not watertight, and serves merely to carry the rudder, which is so constructed that it may be raised or lowered as the depth of the water permits.

The Chinese junk, *Amoy*, under sail.

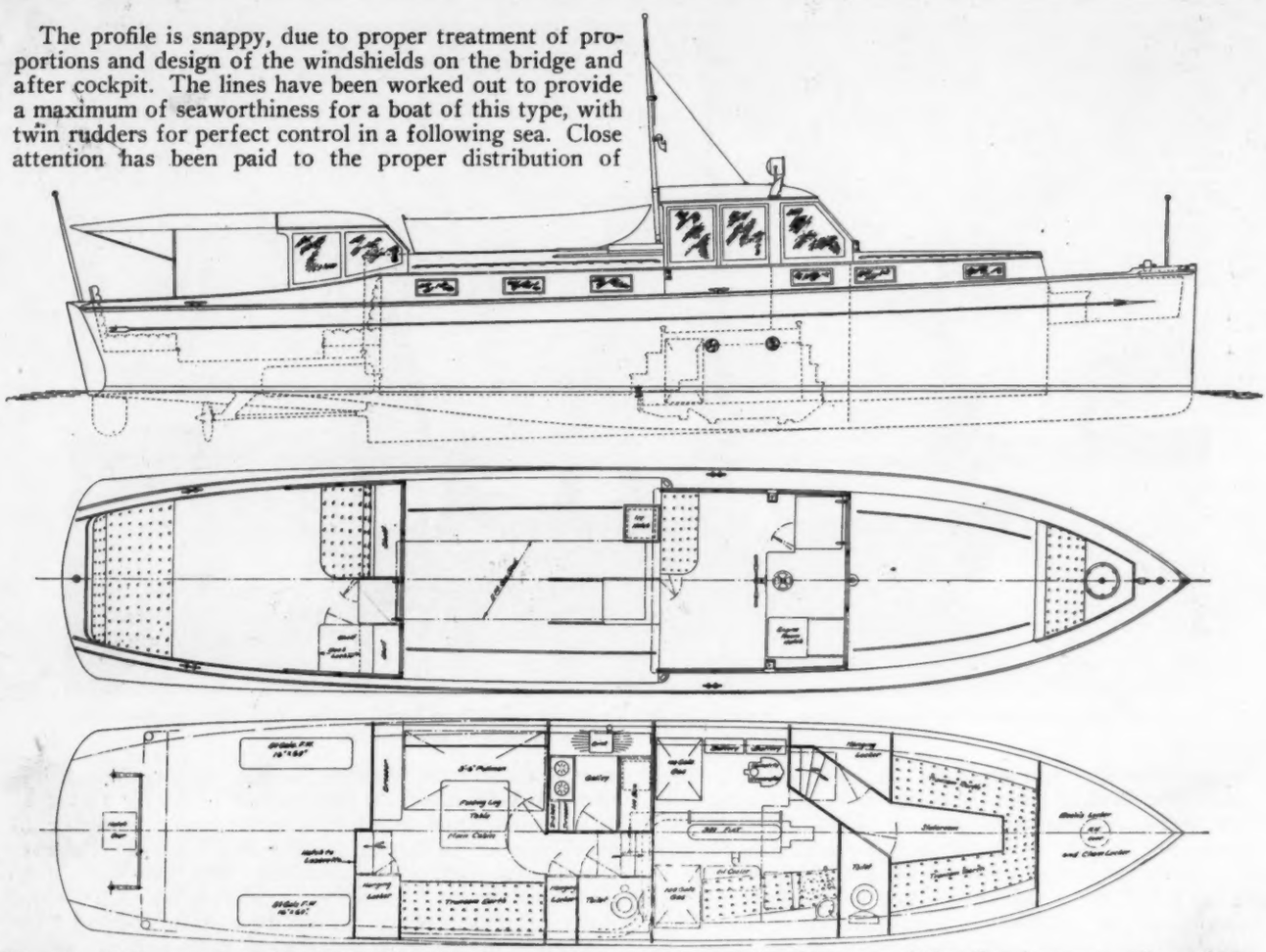
The rudder and the narrow keel really represent the main items of lateral resistance, as they contain together 57.2 sq. ft. of area. Although the total is 147.76 sq. ft., yet the sides below the water are of a form which does not offer important resistance and she therefore makes leeway easily. In fact, this is the principal drawback to the junk, it being unable to make reasonable headway close hauled. No doubt the addition of a centerboard or standing keel would remedy this, but of course this boat unit was developed for shallow waters as well as deep, and quick maneuvering was an imperative requisite, as shown by the rudder proportion of four to one when lowered, which is greater than found on American yachts.

Taken in detail or as a whole the junk emphasizes a point of view which can give us food for thought for some time to come.

Greenport Turns Out a Snappy Express Cruiser

An express cruiser which is "somewhat different," and which is sure to attract favorable comment wherever seen, is shown in the accompanying plans of a 50-footer designed by the Greenport Basin & Construction Co., of Greenport, L. I., and now being built for a resident of Great South Bay. This craft is of the single screw, tunnel stern type, and with her 300 h.p. Fiat motor, should make a good 20 miles per hour, even in shoal waters, where she will be used a majority of the time.

The profile is snappy, due to proper treatment of proportions and design of the windshields on the bridge and after cockpit. The lines have been worked out to provide a maximum of seaworthiness for a boat of this type, with twin rudders for perfect control in a following sea. Close attention has been paid to the proper distribution of

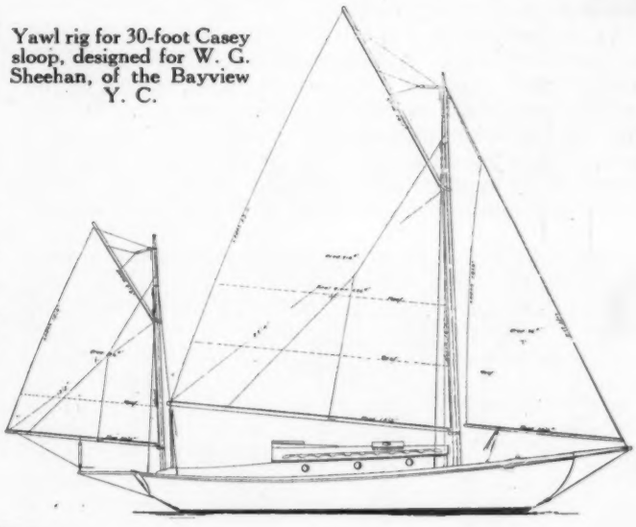


Plans of a 50-foot express cruiser, designed by the Greenport Basin and Construction Company, which will make twenty miles an hour.

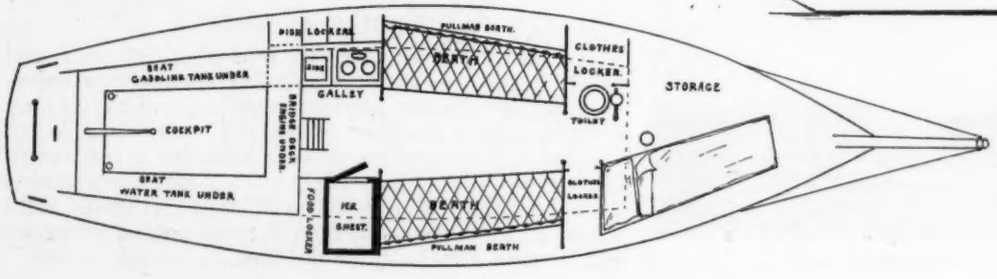
weights to assure slow, easy rolling, a very desirable feature difficult to obtain. With fine accommodations both above and below decks, this craft should prove highly successful for fast cruising in both shoal and deep waters.

A Casey Stock 30-Footer with Yawl Rig

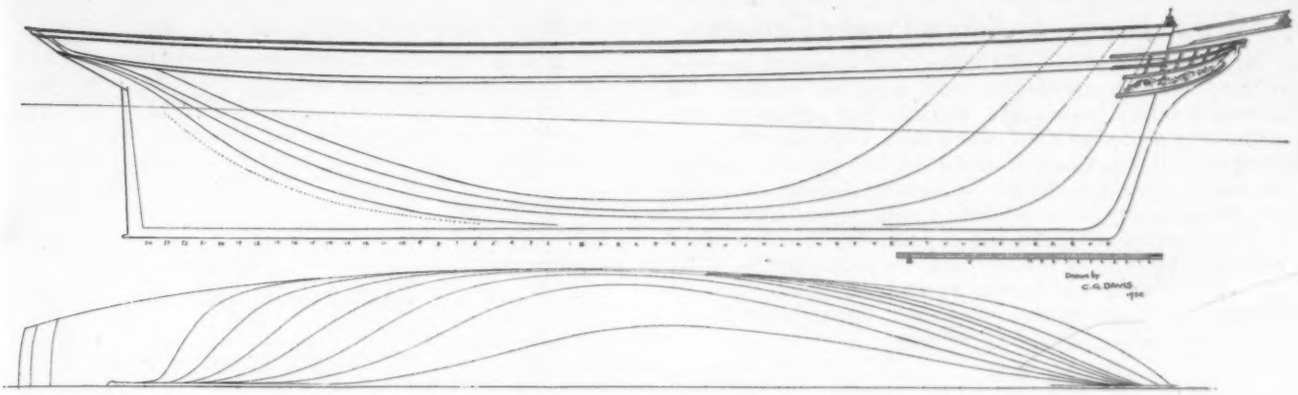
The accompanying plans of a 30-ft. yawl rigged auxiliary were gotten out by the Casey Boat Building Co., of Fairhaven, Mass., for ex-Commodore W. G. Sheehan, of the Bayview Yacht Club, of Detroit. Mr. Sheehan liked the Casey 30-ft. stock hull, rigged as a ketch, which was described in the April issue of YACHTING, but preferred a yawl rig, so Casey obligingly produced the rig shown herewith. The hull is the stock 30-ft. Casey boat, a refinement of the 26-ft. sloop hull, and is 23 ft. waterline, 8 ft. 8 ins. beam, and 4 ft. 6 ins. draft. The layout is the regular plan, with a few minor changes, and additional tank capacity for extended cruising.



Yawl rig for 30-foot Casey sloop, designed for W. G. Sheehan, of the Bayview Y. C.



Accommodation plan of 30-foot Casey yawl.



Lines of old English "butterman" schooner *Peri*. The type was noted for its speed.

Peri, an English "Butterman" Schooner

By CHAS. G. DAVIS

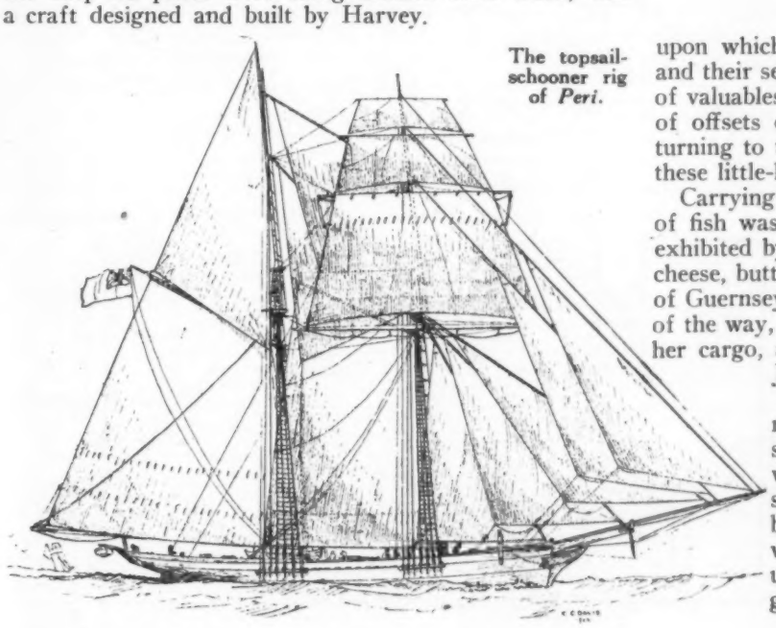
John Harvey

WHEN I was a youngster, my tutor on shipping matters was old John Harvey, formerly of Wyvenhoe, England, who came to America along in the 80's, when the craze among yachtsmen for deep draft cutters was at its height. All day long we two were closely associated in the one-room office of a struggling young naval architect named William Gardner, up on the ninth floor of the old building at Number 1 Broadway, New York City. For three years or more old John and I, mostly John, swapped experiences, and I assimilated a world of information on yachts and ships.

John Harvey had built many yachts under the firm name of Harvey & Pryor. The famous cutter *Aurora*, the only craft in the English fleet which made any showing at all in that famous race around the Isle of Wight in 1851 when the *America* showed the old world the kind of craft the deep-sea pilots were using around New York, was a craft designed and built by Harvey.

One day, when the merits and demerits of the model used by the Sandy Hook pilots in their schooners was under discussion between us, I happened to bring in as a side reference to the discussion the subject of the models upon which the Gloucester fishing schooners were built, and their seaworthiness. Old John fished out from his box of valuables his old memorandum book in which the tables of offsets of the vessels he had built were copied, and turning to the *Peri*, he talked for an hour or more about these little-heard-of but once popular craft.

The body plan shows a beautifully turned hull.



The topsail-schooner rig of *Peri*.

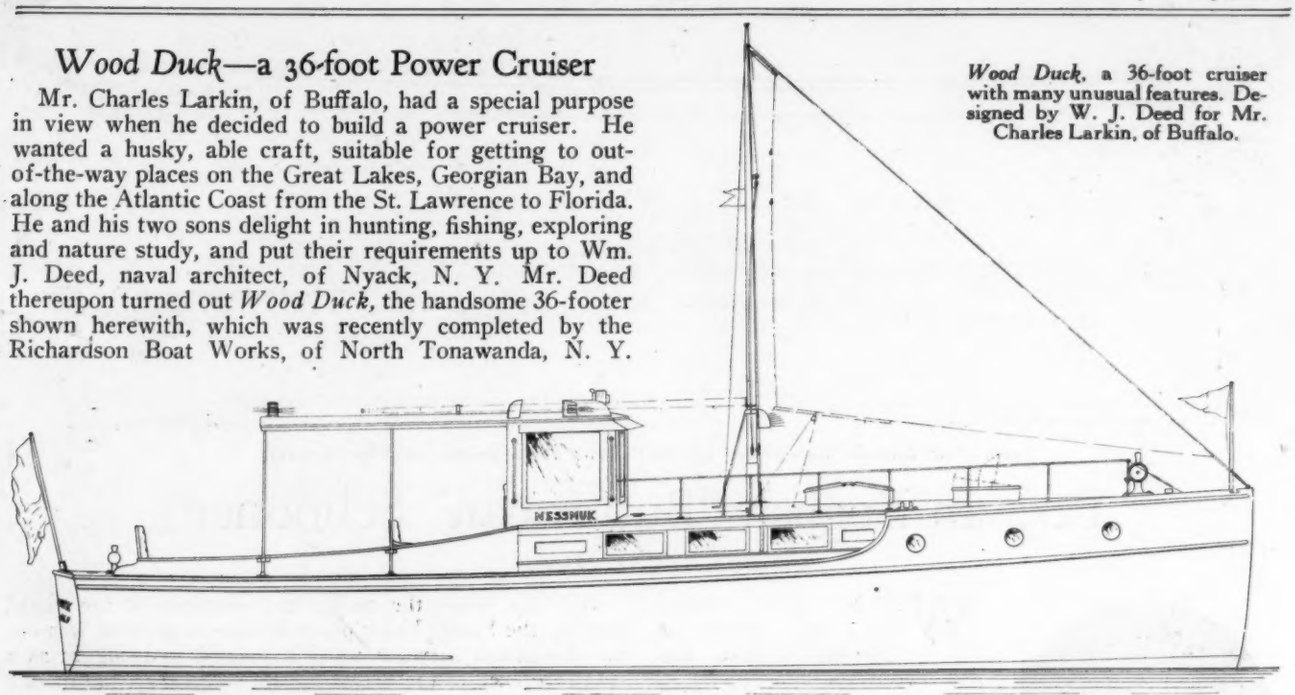
Carrying sail in from the Grand Banks with a full fare of fish was slow going, he said, compared to the sailing exhibited by a fleet of these schooners loaded with milk, cheese, butter and eggs, beating up-channel from the Isle of Guernsey, bound for London. It was a race every inch of the way, the first vessel in getting the highest price for her cargo, and that is why the owners of *Peri* came to John Harvey for a schooner.

It is from a copy I made of these measurements that I have reproduced the lines and sail plan of the "Butterman" schooner. The waterlines show the excessive rake to the midship section, so characteristic of all Harvey's boats. The greatest beam on the lower waterlines is well forward, while on the upper waterlines it is considerably farther aft, giving a far cleaner pair of heels to a craft

(*Continued on page* 82)

Wood Duck—a 36-foot Power Cruiser

Mr. Charles Larkin, of Buffalo, had a special purpose in view when he decided to build a power cruiser. He wanted a husky, able craft, suitable for getting to out-of-the-way places on the Great Lakes, Georgian Bay, and along the Atlantic Coast from the St. Lawrence to Florida. He and his two sons delight in hunting, fishing, exploring and nature study, and put their requirements up to Wm. J. Deed, naval architect, of Nyack, N. Y. Mr. Deed thereupon turned out *Wood Duck*, the handsome 36-footer shown herewith, which was recently completed by the Richardson Boat Works, of North Tonawanda, N. Y.

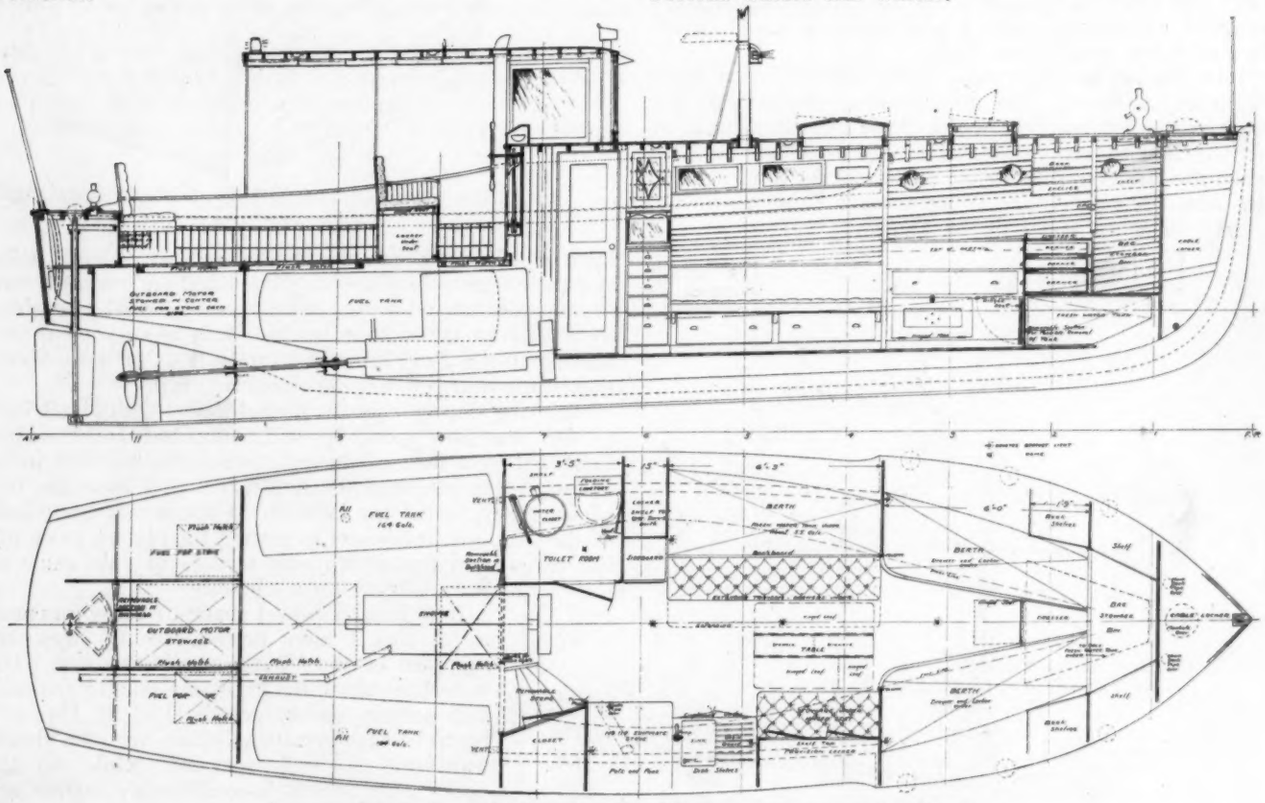


***Wood Duck*, a 36-foot cruiser with many unusual features. Designed by W. J. Deed for Mr. Charles Larkin, of Buffalo.**

Wood Duck is a fine looking, staunch, snug little cruiser, 36½ ft. O.A., 10 ft. beam, and 3 ft. 3 ins. draft, carefully thought out to the last detail for the requirements of her owner. She is able, dependable, comfortable, convenient, and easily handled and cared for without a paid hand. She has three spring berths and an extension transom in her main cabin forward, and a large galley and toilet room abaft it. Three or four people can cruise in her in the greatest comfort, there being a tremendous amount of room everywhere, and every possible convenience.

A heavy duty 20-24 h.p. Standard motor will drive her around 10 miles an hour. Large tank capacity will make possible long trips where fuel and water is difficult to obtain. There is excellent stowage space for everything, even for an outboard motor, and a 9 ft. sailing dinghy is carried on chocks between the two rear seats.

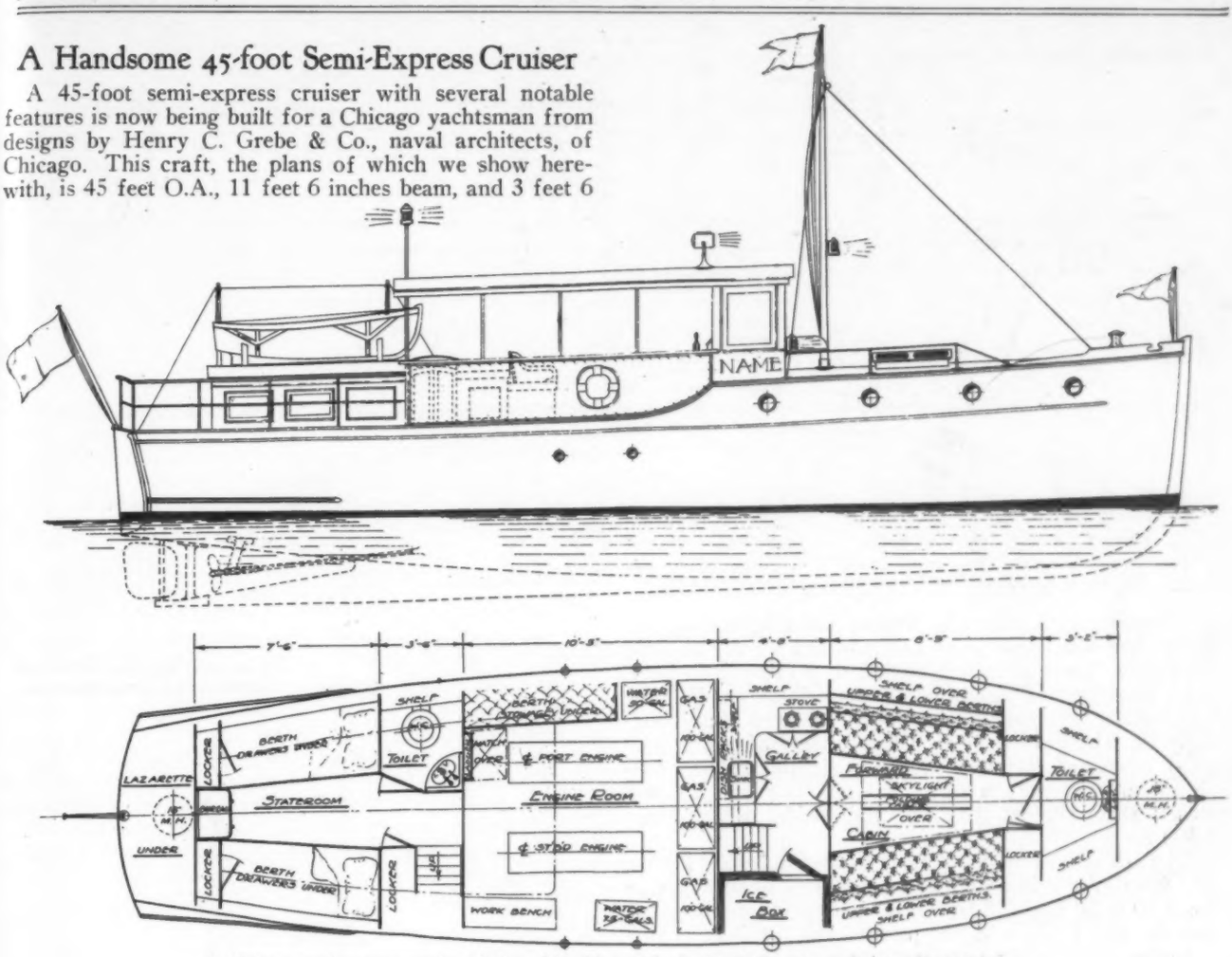
A careful study of the plans should convince one that *Wood Duck* is one of the finest, most complete and thoroughly satisfactory little cruisers that has appeared for some time. She is now on her way South and will be in Florida waters this winter.



Accommodation plan and inboard profile of 36-foot power cruiser *Wood Duck*.

A Handsome 45-foot Semi-Express Cruiser

A 45-foot semi-express cruiser with several notable features is now being built for a Chicago yachtsman from designs by Henry C. Grebe & Co., naval architects, of Chicago. This craft, the plans of which we show herewith, is 45 feet O.A., 11 feet 6 inches beam, and 3 feet 6 inches draft. She will be staunchly built and nicely finished, and her twin 50 h.p. motors will drive her a good 15 miles an hour.



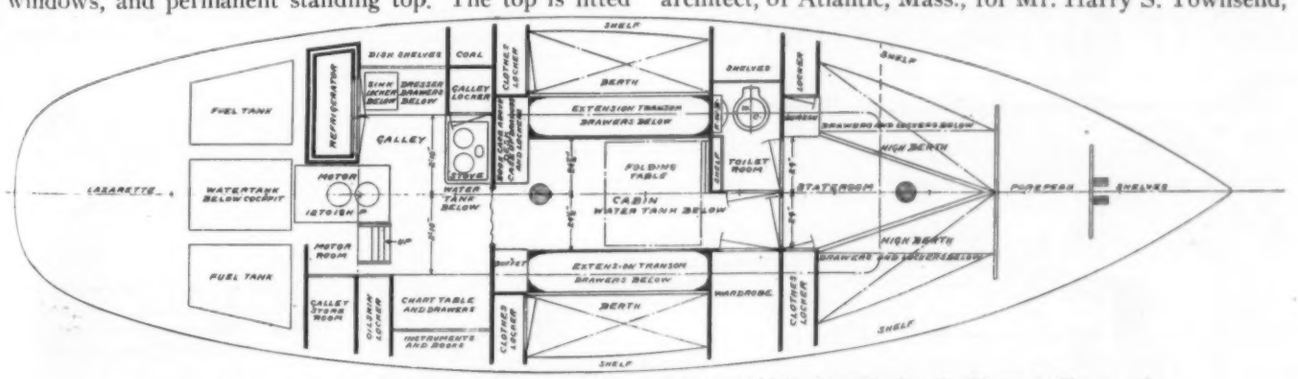
A 45-foot semi-express cruiser designed by Henry C. Grebe & Co., for a Chicago yachtsman.

The arrangement below decks is somewhat different from most craft of this type. Forward is the toilet room, hanging lockers, etc., followed by a fine cabin with four berths. Abaft this cabin is the galley, easily accessible from both the cabin and the bridge deck. A large motor compartment is amidships, with large water and fuel tanks, and berth for a paid hand. The owner's double stateroom is aft, connecting with a second toilet room, access being by a companionway on the starboard side.

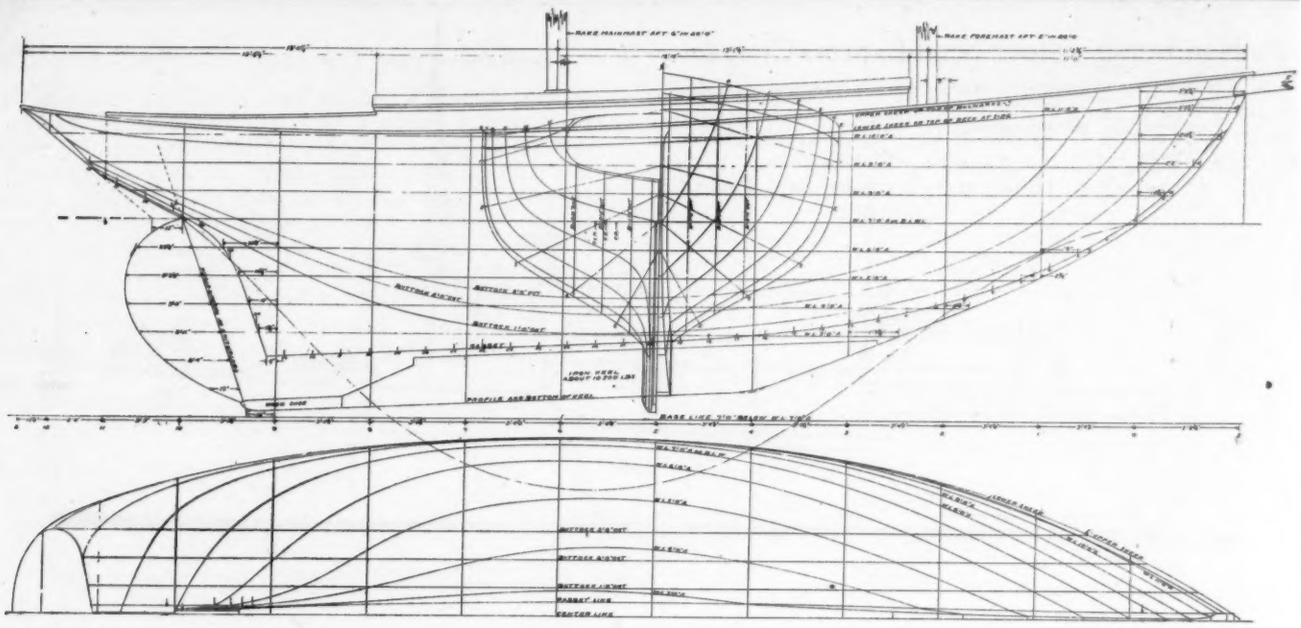
An unusually large bridge is placed amidships, partially enclosed by a permanent windshield with hinged windows, and permanent standing top. The top is fitted with curtains all around, making the bridge practically enclosed, and giving comfortable access between forward and after cabins in bad weather. With her snappy appearance, comfortable accommodations throughout, and fine turn of speed, she should give thorough satisfaction to her owner, who will use her for extended cruising on the Great Lakes. She is strictly a "one-man" boat, but with accommodations for a paid hand should the owner desire to carry one.

A 43-foot Seagoing Schooner

The accompanying plans of a husky, seagoing auxiliary schooner were gotten out by Ralph E. Winslow, naval architect, of Atlantic, Mass., for Mr. Harry S. Townsend,



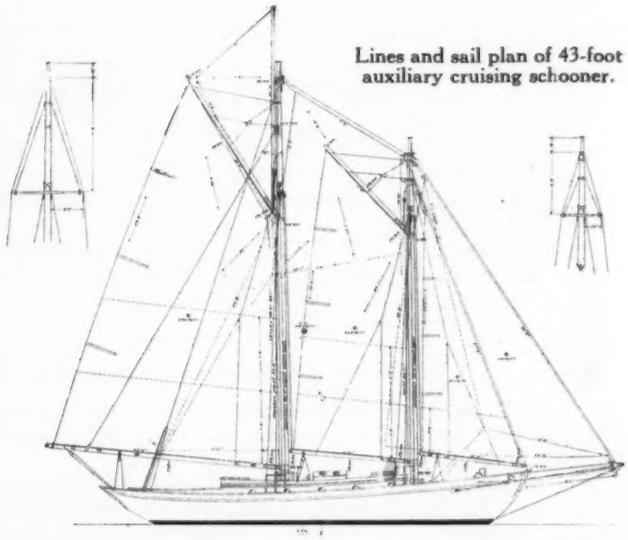
Accommodation plan of a 43-foot overall cruising schooner designed by Ralph Winslow for Harry S. Townsend.



of Providence, R. I., who wanted an able, strong and fairly fast boat with good accommodations for at least six people. The hull is deep bodied, with fairly good bilge, good deadrise and somewhat S-shaped garboards. The bow is high, buoyant and sharp, and the stern correspondingly so. The sheer has a moderate amount of sweep, with good freeboard throughout, being slightly higher amidships than on some craft of this type. The iron keel will weigh about 10,500 lbs., and the inside ballast about 3,500 lbs.

The sail area of 1,080 sq. ft. is divided into four lowers, jib, forestaysail, foresail and mainsail. A small motor of some 10 to 20 h.p. will be installed, mainly for emergency use, the boat being designed primarily as a sailer.

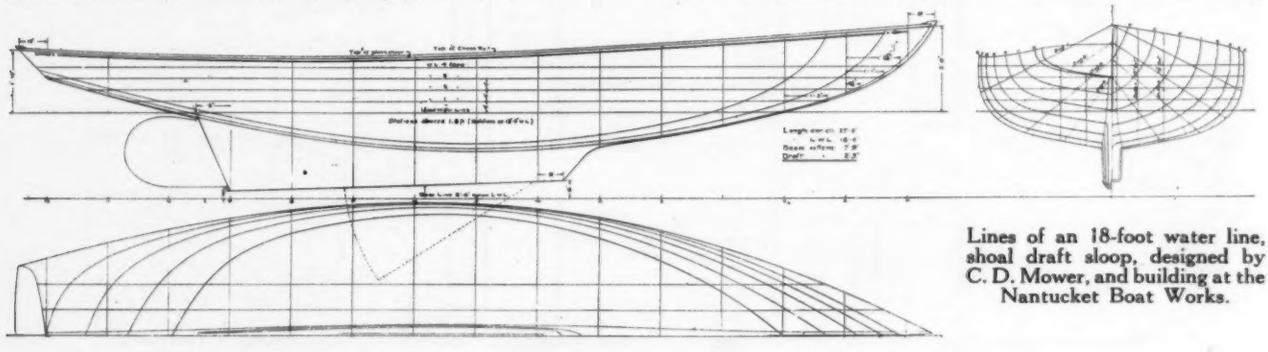
Below decks are ample accommodations for six persons, with lots of stowage space. Abaft a spacious forepeak is a fine double stateroom, with lockers, bureau, etc., and connecting with the toilet room to port. The main cabin is amidships, with two built-in berths and two extension transoms, clothes lockers, buffet, bookcase, and folding dining-table. A large galley is aft on the port side, with chart table, case, etc., opposite, this part of the boat acting as a vestibule for keeping out the wet. Large fuel and water tanks, large ice box and excellent galley equipment round out a thoroughly practicable and comfortable arrangement for mixed parties on long or short cruises. The dimensions are: l.o.a., 43 ft. 3 ins.; l.w.l, 33 ft. 9 ins.; beam, 12 ft. 6 ins.; draft, 6 ft. 9 ins.



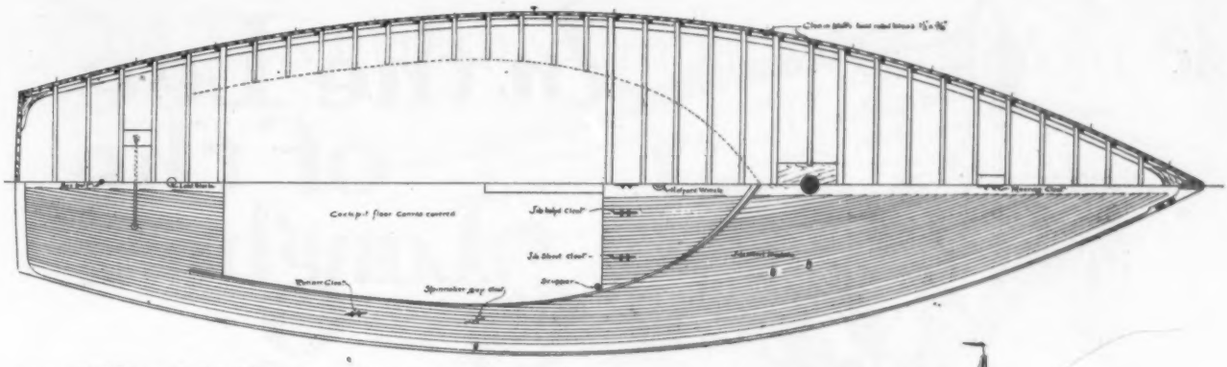
Lines and sail plan of 43-foot auxiliary cruising schooner.

An Interesting Design for a One-Design Class

Individuals and clubs interested in forming one-design classes should find the accompanying plans by Charles D. Mower, naval architect, of New York, of great interest. This craft, designed originally for the Point O'Woods Yacht Club, is of the combination keel and centerboard type, being 27 ft. overall, 18 ft. waterline, 7 ft. 6 ins. beam and 2 ft. 3 ins. draft, with a sail area of 350 sq. ft. She should be fast, able, and dry, with ample cockpit space and a small cuddy forward large enough for protection in rainy weather, or for a couple of youngsters on short cruises. The iron keel of 800 lbs. makes her practically uncapsizable. Prices on these boats should range



Lines of an 18-foot water line, shoal draft sloop, designed by C. D. Mower, and building at the Nantucket Boat Works.



between $1,200 and $1,500, depending upon the number built, sails, equipment, etc.

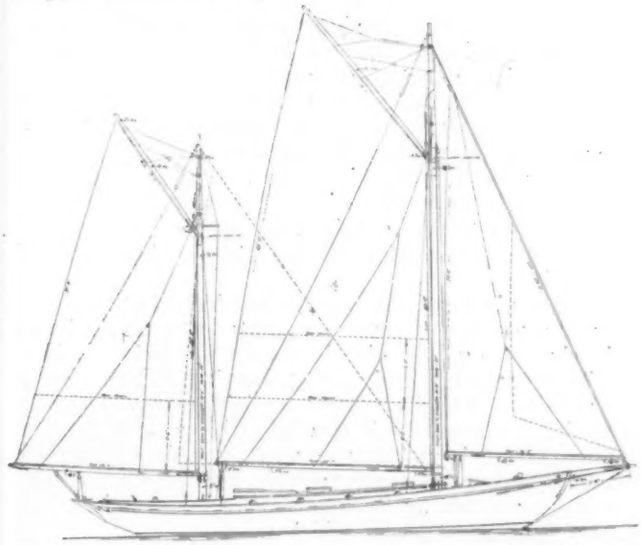
Two are now being built by Roy A. Deering, of the Nantucket Boat Works, Nantucket, Mass., for summer residents of Nantucket. Several more orders are expected by these builders, who may also build a number for stock.

A Ketch Rig on Duplicate of *Malabar IV*

Completed last summer at the Cumberland Shipbuilding Company's yard at Portland, Me., the ketch *Felisi* is an especially interesting craft, inasmuch as the hull is an exact duplicate of John G. Alden's *Malabar IV*, winner of the 1923 Bermuda Race. There is a growing interest in the ketch rig for cruisers, due to its ease of handling and inherent balance. *Felisi* was sailed all last summer and proved a great success, particularly in her steering qualities, the boat sailing herself for long periods without attention from the helmsman. While no definite data is available about her speed, her owner is thoroughly satisfied with her performance, and believes she would make *Malabar IV* hustle to beat her. The rig has 1,217 square feet of sail in her three lowers.

Annual Meeting of the Model Yacht Racing Association of America

At the annual meeting of the Model Yacht Racing Association of America, held on December eleventh, in New York, the officers who served last year were re-elected for 1925. These are: President, H. L. Stone; Vice-President, Howard Griffiths; Treasurer, E. A. Bull; Secretary, E. F. Judd. The secretary's address is 14 Bruce Road, Upper Montclair, N. J.



Ketch rig on *Felisi*, a duplicate of the schooner-rigged *Malabar IV*.

Deck and sail plan of 18′ water line knockabout designed by C. D. Mower.

The Season's Results in the Central Park Model Yacht Club

The Central Park Model Yacht Club, which carried off the honors in the races for the famous Eagle Cup, on September 14th, has just brought to a close a very successful racing season for 1924. While no C or D class boats came out in sufficient numbers to warrant trophies being offered, the B class boats furnished a keen contest throughout the season for the pennants offered by the club. These B class yachts have been tuned up to the point where the maximum speed seems about reached.

The members appreciate the fact that they have a fine course on which to sail model races on Flushing Bay. The Eagle Cup may change hands next year, but the C. P. M. Y. C. boys are planning to put up a game fight to keep the coveted trophy and it is rumored that three or four new boats are now on the drawing boards and will make their appearance when the starting gun opens the season of 1925.

Following are the results for the season's racing:

Yacht	Owner	Points	Races Sailed
Fantasy	J. A. Weaver	54	9
Mary	P. Pile	40	9
Mildred	C. W. Bedell	30	9
Hyatt	A. Jedlicka	23	8
Imp	L. B. Battey	13	4
Blackball	B. Anderson	11	2
Two Sisters	J. Jagshitz	10	8
Starlight	W. Bloomfield	9	4
Uno	C. Zeiloth	1	2

In the Lee of the Longboat

by Cap Stan

HE'S in again! His Grace, the Duke of Leinster, once more has invaded our shores and is hurling challenges right and left to anyone, anywhere, to a race across the Atlantic. This, of course, is according to the newspapers, for no person or yacht club, so far as I know, has received any challenge. Really, after his fiasco of two years ago, this new bally-hoo seems like very bad taste. The Duke will arouse nothing more than mild antagonism by using such tactics, and I'd suggest that he'd be better off if he'd return to his alleged shattering of automobile speed records — on the far side of the Atlantic.

* * * * * * *

I'm frank to admit that I learned a tremendous lot about the real workings of the British and American rating rules after studying "Chick" Maxwell's article in the last issue. It certainly is a corker—gives you the complete dope in a way that anyone can understand. The revision of our rule is one of the main topics of discussion in racing circles today. If you're interested at all, read that article carefully, and you'll get an insight into rating rules that will give you a chance to form an intelligent opinion as to the pros and cons of the different arguments which are read and heard on all sides.

* * * * * * *

Another good article last month was the one by Fred Goeller, on gaff and Marconi rigs—well worth reading and digesting. But I'll have to go to the mat with Fred when he discredits the jib-headed rig for cruisers on the grounds that "recent records show that since the advent of the jib-header innumerable masts have been carried away in one season," etc. This positively is not so—*on cruisers*. On racers, perhaps, where the weight of spars and rigging has been cut down until the factor of safety has reached the vanishing point. But statistics on racers don't apply to cruisers. And having kept a pretty close watch on a lot of bona-fide jib-headers the past two or three seasons, I don't recall hearing of a *single dismasting*. If Fred can point out a few, let alone "innumerable" instances which have escaped me, then I'll be glad to back water. Otherwise, I'll keep right on rowing.

* * * * * * *

Shanghai gets wrecked on the Nova Scotia coast, *Leiv Eiriksson* has been missing since September 8th. and Alain Gerbault got pretty well bashed up on his 17-day trip to Bermuda. Altogether, it's been a tough season for blue water sailors.

We have the dope on *Shanghai* and *Firecrest*, but we can only conjecture as to what has happened to "Bill" Nutting and his crew on *Leiv Eiriksson*. If they had reached Labrador or Baffin Land after leaving Greenland, it seems certain that we should have heard from them by now through one of the Hudson's Bay trading posts. The one hope left seems to be that they managed to get back to Greenland, and if they did, we won't hear anything till spring. So until then, we can only go on hoping and praying that "Bill" and his crew have managed in some way to wage a successful battle against tremendous odds.

* * * * * * *

I had a short note from Gerbault soon after he reached Bermuda: ". . . Very wet trip, deck leaking, run down by a steamer at night, tore away the forward bitts, lifted the deck, set loose my jibstay and forestay . . . very rough sea, average strength of wind 7 Beaufort . . . terrific chafing of gear . . . rudder port leaked. . . ." Well, he's having his troubles, all right, just as he had them in his transatlantic crossing. But is he discouraged? Not a whit. He's getting *Firecrest* all dolled up for a trip through the Panama Canal to the South Seas, just as if one Blue Water Medal wasn't enough!

* * * * * * *

Weston Martyr has certainly "started something" over in England, judging by the dope in the December number of the English *Yachting Monthly*. A long article by Martyr, anent ocean racing in general, and the lack of it in British waters, is backed up by a strong editorial urging some action in the matter. Where there's so much smoke, it would be odd if some kind of a fire didn't break out, wouldn't it? I hope they kindle one, and furthermore, would sure like to see a couple of our representative windjammers hike across the pond and make an international affair of it.

We have plenty of boats which would be ideal for the job, and a number of competent sailors who would jump at the chance to go. All that is necessary is to let the idea sink in, get together on it, and "go to it." Who's ready? If somebody will lend me a boat, I might go myself. Don't be bashful, mates—crash through with a few lines if you're interested, and maybe we'll be able to shoot a couple of craft across next summer and see what American boats, manned by Yankee crews, can do when pitted against British boats and British sailors.

The Twentieth Annual Motor Boat Show

THE Motor Boat Show has become in the last twenty years a large part of every boating season. In fact, it is probably the biggest single feature in the year. This year the show is unusually comprehensive and on the floor of the Palace will be found exhibits made by practically every manufacturer of boats, engines and yacht equipment in this country. Here can be studied the latest developments in yacht and small-boat design and construction, and here will be seen everything in the way of engines—from the small "one-lunger" to the big Diesels or high-powered engines for express cruisers and racing boats.

The 1925 show promises to be the best ever given by the National Association of Engine and Boat Manufacturers. In the following pages will be found descriptions of the leading exhibits:

Who They Are and Where They Will Be Found

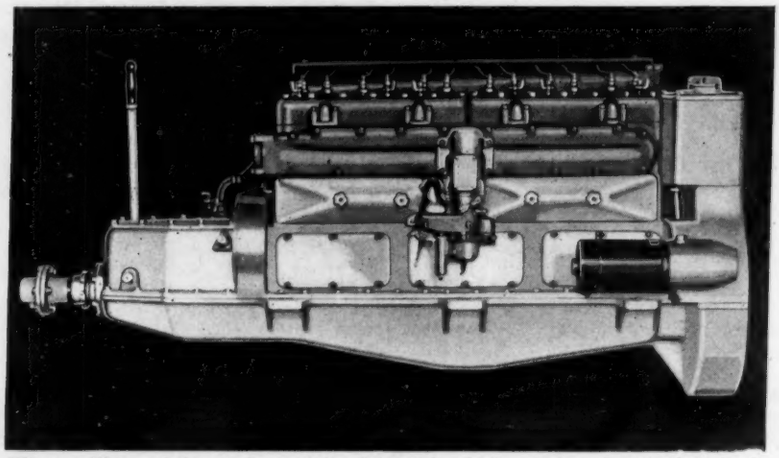
Booth No.	EXHIBITOR
51	Albany Boat Corporation.
103	Alden N. A., John G.
102	American Bosch Magneto Corp.
41	American Engineering Co.
65	American Machine & Foundry Co.
B-5	Banfield Sea Skiff Works.
B-3	Belle Isle Boat & Engine Co.
B-8	Beckhard, Bruno.
B-7	Bergh Boat Corp.
107, 108, 109	Bosch Magneto Co., Inc., Robert.
K & L	Bowler, Holmes & Hecker Co., Inc.
L	Bridgeport Motor Co., Inc.
25	Briggs Engineering Co., Inc.
27	Brooklyn Varnish Mfg. Co.
J	Brownback & Associates, H. L.
D-2	Buda Co., The.
D-1	Cady Co., C. N.
J	Caille Perfection Motor Co., The.
A-6	Cape Cod Ship Building Corp.
43	Carpenter & Co., Geo. B.
A-5	Columbia Boat Co., Inc.
60 & 61	Columbian Bronze Corp.
A-2, A-3 & 40	Consolidated Shipbuilding Corp.
	Dawn Boat & Shipbuilding Corp.
30	De Bevoise Co., The.
A-1	Dodge Boat Works, Horace E.
16	Domestic Electric Co., Inc.
56	Edson Mfg. Co.
49 & 50	Eisemann Magneto Corp.
A-8	Elco Works, The
C	Elto Outboard Motor Co.
E	Evinrude Manufacturing Corp.
G-1 & G-2	Fay & Bowen Engine Co.
67	Ferdinand & Co., L. W.
E	Frisbie Motor Co., Inc.
B-2	Gordon Boat Building Co., The.
K & L	Gray Marine Motor Co.
45	Gray, Russell.
A-5	Greenport Basin & Construction Co.
32 & 33	Guinan, Inc., B. F.
15	Great Lakes Boat Building Corp.
F-1	Hall-Scott Motor Car Co., Inc. (Eastern Branch.)
K & L	Haskell Boat Company.
B-1	Holt Engineering Corp.
101	Hyde Windlass Co.
A-7	Jardine Co., Inc., Edward Fell.
E	Johnson Motor Co.
C	Kahlenberg Bros. Co.
J & K	Kermath Mfg. Co.
47 & 48	Koven & Bro., Inc., L. O.
35	Lake Hopatcong Association.
D-1	Lathrop Co., Inc., J. W.
	Lockwood-Ash Motor Co.
B-5	Luders Marine Construction Co.
73	Loew Mfg. Co., The.
105 & 106	McNab Kitchen Rudder Corp., The.
39	Master Reverse Gear Corp.
H	Maybach Motor Co.
L	Mianus Diesel Engine Co., The.
B-4	Milton Boat Works.

Booth No.	EXHIBITOR
72	Monarch Valve Co.
39	Monolith Co. of America, The.
63 & 64	Motor Boat Publishing Co., The.
52-58	Motor Boating.
111	National Carbon Co.
62	National Marine Lamp Co.
A-4	New England Boat Works.
J	New Jersey Motors, Inc.
34	New Jersey Paint Works.
J	New York Yacht, Launch & Engine Co.
M	Niagara Motors Corp.
O	Otis Engine Corp.
42	Ovington Brothers Co.
F-2	Packard Motor Car Co.
C	Palmer Bros. Engine Co.
36	Pantasote Co., Inc., The.
21 & 22	Paragon Gear Works.
D-2	Peerless Marine Motor Corp.
A-6	Perrine, J. H.
B-8	Peterborough Canoe Co., Ltd.
74	Portable Light Co., The.
110	Power Boating.
13	Rajah Auto-Supply Co.
B-2	Red Bank Yacht Works.
C	Red Wing Motor Co.
J	Remington Oil Engines, Inc.
28 & 29	Rudder Publishing Co., The.
23 & 24	Smith & Company, Edward.
31	Smith-Meeker Engineering Co.
M	Sexton Motor Co., Inc.
46	Schellenberg & Sons, B.
B-1	Scripps Motor Co.
B-1	Sea Sled Co., Ltd., The.
112	Smith & Serrell.
71	Snow & Petrelli Mfg. Co., The.
37	Splitdorf Electrical Co.
K & L	Stearns Motor Mfg. Co.
E	Sterling Engine Co.
78	Stromberg Motor Devices.
70	Standard Oil Co. of N. Y.
19 & 20	Tiebout, W. & J.
104	Topping Brothers.
26	Tucker, E. H.
B-8	Toppan Boat & Engine Co.
K	Universal Motor Co.
54 & 55	Valentine & Co.
E	Van Blerck Engine Corp., Joseph.
C	Verrier Eddy Co.
112	Waldron Corp., John.
A-7	Welin Davit & Boat Corp.
79	White Co., Kelvin & Wilfrid O.
F-1	Wellman-Seaver-Morgan Co., The.
59	Wheeler-Schebler Carburetor Co., The.
66	White-Warner Co., The.
83, 84, 87	Willis Co., E. J.
A-4	Wood, Inc., B. F.
B-4	Wood, Inc., Gar.
17	Woolsey Paint & Color Co., C. A.
B-6	Wright Aeronautical Corp.
B-8	White & Co., E. M.
100	Yachting, Inc.
F-1	Young, Wilbur H.
75 & 76	Zundel Co., Inc., R. W.

The Exhibits—Boats, Engines and Accessories

A Fine Exhibit of Kermaths

Visitors to the Motor Boat Show will be among the first to be able to examine the new Kermath 6-cylinder motor, described in the December issue of YACHTING. Both the high and low speed models of this new creation have been in constant service for some time, and due to the fact that a limited number of customers and friends of the Kermath Co. had advance notice of its arrival, $50,000. worth of business has already been booked. Besides the new motor, the complete Kermath line will be on exhibition, consisting of the 3 h.p. single-cylinder, 4-5 h.p. twin-cylinder, 6-8 h.p. twin, 12 h.p. four-cylinder, 16 h.p. four, 20, 35, 50 and 75 h.p. four-cylinders, the 60-100 h.p. new model completing a fine showing of the motor which "always runs."

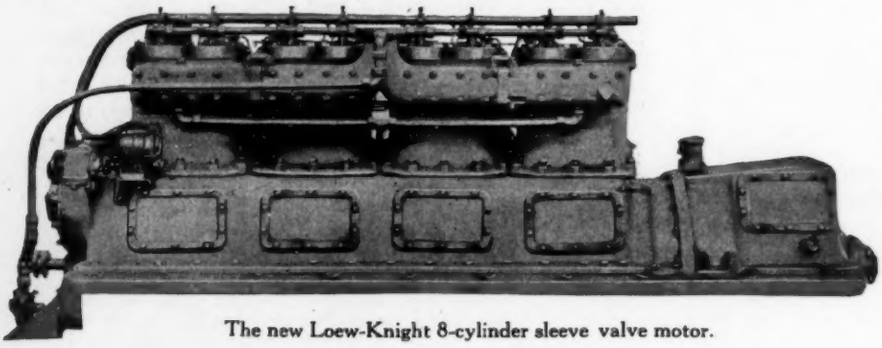


The new Kermath 6-cylinder model, exhibited for the first time. It is built in both high and low speed models.

The New Loew-Knight Motor

Of interest to everyone in the marine field is the announcement of The Loew Manufacturing Company, Cleveland, makers of the formerly well-known Loew Victor marine engines, that they are now in production with a comprehensive line of Knight type marine gasoline engines, known as the Loew-Knight, for the general marine field.

Because of its generally admitted advantages, the Knight type sleeve valve engine would have been built long ago for general marine service if it had been possible to secure a license to manufacture it for that purpose. The Loew Manufacturing Company has recently secured such license, giving them the exclusive right to build and sell Knight engines for marine use.



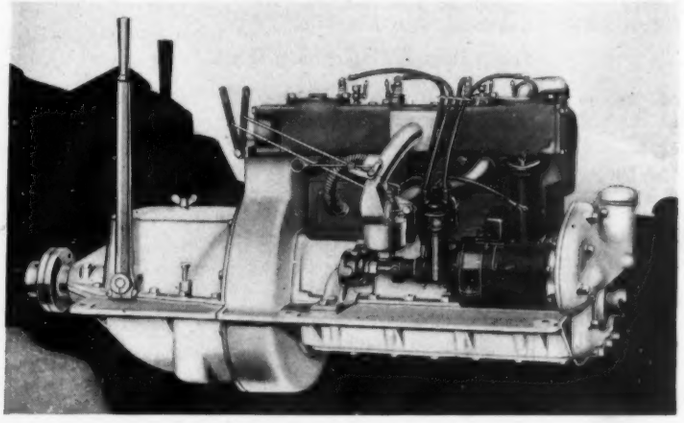
The new Loew-Knight 8-cylinder sleeve valve motor.

The Loew-Knight, while new to the marine field, is not in any sense a new product. It is a thoroughly tested, highly developed power plant that has demonstrated its worth in marine service over a period of several years. Shipbuilders, marine engineers and architects, and the men who are continually looking for something better in marine propulsion, will, without doubt, be intensely interested in the silent, smooth performance of the Loew-Knight, and its clean-cut, trim design.

It is fortunate that the right to go into production in quantity of Knight marine engines has been granted to a company that has had many years' experience in marine engine designing and building. The Loew Manufacturing Company has a finely equipped, modern plant, with every facility for caring for the demand for these new engines. The Loew-Knight is built in various sizes, from 50 h.p. to 300 h.p.

A Fine Line of Gray Motors

"From Six to Sixty" is the range of horsepower that will be found in the full line of attractive Gray Motors to be shown by the Gray Marine Motor Co. The latest Gray, the Model Z, a four-cycle of 14-20 h.p., is their leader, and is now in its third year of successful operation. This clean, compact and powerful engine is absolutely reliable and dependable at all speeds, whether installed in cruiser, runabout, auxiliary or workboat. Other models to be exhibited are: Model V, four-cylinder, four-cycle, valve-in-head, offered in low, medium and high speed models; Model VB, similar to Model V, suitable for the fisherman or work boatman; Model VE, a heavy duty motor, similar to Model VB; and the 2-cycle 2-cylinder Model U, of 6-8 h.p., the smallest and oldest Gray model.



The latest Gray Engine is Model Z, 4-cylinder 14-20 h. p., now in its third year of successful operation.

Photo by Battle Fleet Camera Party, U. S. S. Procyon

The Admiral's "Barge" is Valsparred

First to land in any port—always entrusted with special despatches—the U. S. Navy speed-boats are the pride of their picked crews.

And they are constantly maintained in perfect condition. The huge 12-cylindered motors operate with perfect smoothness, brasses shine, the polished mahogany decks are immaculate, their varnish gleaming!

No easy task to keep these exposed surfaces ship-shape—especially in rough weather, when tons of sea-water, laden with sharp, cutting sand, hammer every inch of the beautiful wood! To insure a finish that will stand up under such terrific stress, nine out of ten speed-boats in our Battle Fleet are Valsparred.

"Valspar is the only finish we've ever used that has withstood the action of the sea," asserts Chief Boatswain's Mate W. C. Kessler, commanding the speed-boats of the U. S. S. Melville.

Absolutely waterproof, Valspar will not check, peel or whiten in water, no matter how long it is immersed. Incredibly tough and elastic, it withstands rubbing, vibration, abrupt changes of temperature. And it dries in less than 24 hours. On every score Valspar is the varnish for marine use!

Postscript

Valspar is made only by Valentine & Company. On account of its toughness, waterproofness and beauty, Valspar has a wide range of uses—air and sea planes, dirigibles, the eyes of submarines, bridges on destroyers—in fact, everywhere an absolutely dependable and permanent varnish is required.

This coupon is worth 20 cents to $1.60

VALENTINE'S
VALSPAR
The Varnish That Won't Turn White

VALENTINE & COMPANY Yacht. 1-25
460 Fourth Ave., New York

I enclose dealer's name and stamps, amounting to 20c for each 40c sample can checked at right. (Only one sample of each product supplied at this special price. Write plainly.)

Valspar Instruction Booklet with Color Charts, 15c extra.

Dealer's Name .....
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Your Name .....
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Clear Valspar	☐
Valspar Bronze Bottom Paint	☐
Aluminum Paint	☐
Gold Paint	☐
Yacht White	☐
Yacht Black	☐
Valspar-Enamel (Choose 1 Color)	☐
Valspar-Stain (Choose 1 Color)	☐
Valspar Booklet	☐

The 26-foot Belle Isle Hacker *Dolphin*, equipped with a model F 6-cylinder Scripps which drives her better than 30 miles per hour.

A New 30-Foot Bearcat

Each year the motor boating public, and particularly that portion of it which attend the Motor Boat Show in New York, look forward with considerable interest to what the Belle-Isle Bearcat will have to show in the way of new improvements.

The first Bearcat to be exhibited in New York was shown at the Motor Boat Show in 1921 and was the first standardized runabout to feature a forward cockpit and forward drive. Each successive year improvements have been made and refinements have been added, to keep the Bearcat not only abreast but considerably ahead of the procession, and this year will be no exception.

The new Super-Bearcat to be presented to the public for the first time at the 1925 Show is the result of five years' steady concentration on the building of standardized runabouts of this type. It will be considerably larger than the earlier Bearcats, the dimensions being 30 ft. x 7 ft. Embodying all the time-proven qualities of the famous twenty-six-foot Bearcat, the new Super-Bearcat will again step out as the last word in standardized runabouts.

With no advance pictures, blueprints, or literature, but based solely on the reputation earned by the present Bearcat, several advance orders for the new thirty-foot model have already been booked for early Florida shipment. One of these will be delivered to James A. Stillman, of New York, at Palm Beach, and another to John Kunsky, of Detroit, at Miami.

Among the many new features to be found in the Bearcat are a much larger forward cockpit, with ample seating accommodations for seven, and with greatly increased leg room adding to the comfort. The instrument board is one of the finest that has ever been used on a boat, being entirely enclosed under plate glass, with the different dials and gauges indirectly illuminated. The windshield is semi-octagonal in shape, coming far enough around on either side to fully protect the passengers against spray from either side. In the after cockpit the back of the seat folds down and forms part of the deck when the cockpit is not in use.

The 35-foot Consolidated V-Bottom high speed runabout with 180 h. p. Speedway engine.

The Belle Isle-Hacker Boat Sales Company will also present at the New York Motor Boat Show their new 1925 model twenty-six foot Dolphin, built for them by the Hacker Boat Company. This Dolphin has been designed to meet the demand for a staunchly constructed and richly finished twenty-six-footer with large forward cockpit and with a real marine motor which can be counted on to give, day in and day out, consistent service. Equipped with a model F 6-cylinder Scripps, the Dolphin is capable of better than thirty miles an hour. The new features of this model, in addition to its increased length, are a new type windshield, a larger and more commodious forward cockpit, and a wicker settee in the after cockpit.

Consolidated Will Show Both Boats and Engines

Back at their old stand at booths A-2 and A-3, the Consolidated Shipbuilding Corporation will have an attractive exhibit of four boats, backed up by a fine display of Speedway engines, ranging in horsepower from 22 to 300, including new models. The boats which will be exhibited are:

A 34-ft. Speedway Play Boat, completely equipped, powered with an overhead valve 180 h.p. Speedway.

A 35-ft V-bottom high speed runabout, powered with 180 h.p. overhead valve Speedway engine.

A 16-ft. yacht tender, with Universal Engine installation.

An 8-ft. mahogany and cedar dinghy.

Cape Cod Ship Building Has Large and Interesting Exhibit

One of the most comprehensive exhibits of small craft for rowing, sailing and motoring will be that of the Cape Cod Shipbuilding Corp., of Wareham, Mass. The popular 18 ft. Cape Cod Baby Knockabout heads the list of sailing craft, followed by a new 15-footer, the Junior Sail Boat, a craft sure to attract a lot of attention from those who do not want quite as large a boat as the Baby Knockabout, but appreciate a smaller, fast, thoroughly safe craft which requires no ballast and sails in very shoal water. The 14-ft. Sailing Skiff is a size smaller, is flat bottomed, and makes a very serviceable boat especially adapted for sailing in coves, creeks, ponds, etc. Both this and the 15-ft. Junior Sail Boat can be used in connection with an outboard motor. Other models will be a 14-ft. seagoing outboard motor boat and several rowboats and skiffs.

The 18-foot Cape Cod Baby Knockabout

And now there is another

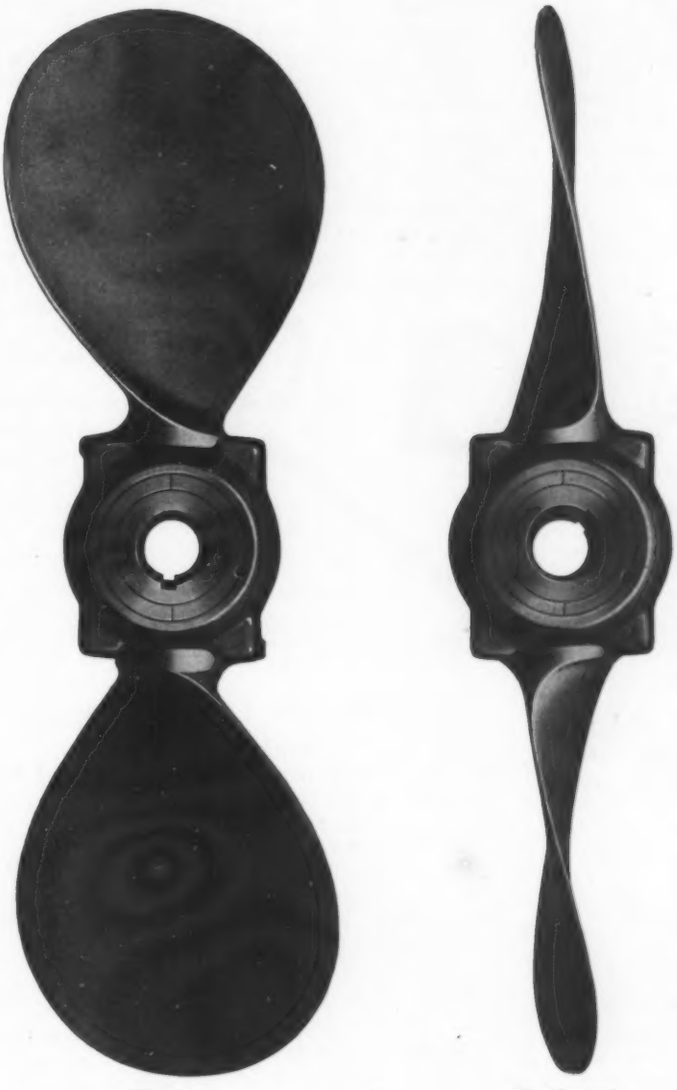
HYDE

It is the HYDE AUTOMATIC FEATHERING PROPELLER for auxiliaries

No hollow shafts or sleeves.

No levers.

Installed the same as a solid wheel.



Working Feathered

Cannot jam.

Positive in action.

Feathers automatically when clutch is thrown out.

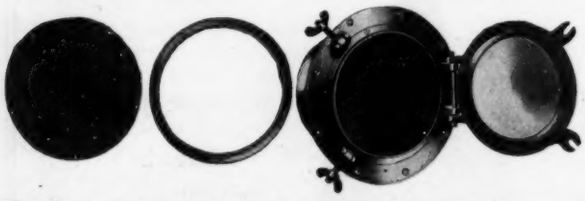
See this propeller together with our Turbine Type and No-Weed wheels, also our line of Stuffing Boxes and Stern Bearings at the New York Motor Boat Show

SPACE 101—MEZZANINE FLOOR

Hyde Windlass Company **Bath, Maine**

Carpenter's Specialties

The Geo. B. Carpenter Co., of Chicago, Ill., have an attractive exhibit of special equipment which is sure to be of interest to any and all who want the latest and best. The new Carpenter Steerer is the latest addition to their line. Among its many fine features may be mentioned the oversize steering column, horn button in center of steering wheel, adjustable angle of column to suit any boat, new style finger type spark and throttle controls, etc. The G. B. C. Portlight has many features to recommend it, such as a fly screen which will stay firmly in position, yet may be easily and quickly removed at any desired time. Other articles to be exhibited are Carpenter running lights, Carpenter post lights, the well-known G. B. C. adjustable strut, Kainer Ropeless Steerer and Carpenter Wireless Searchlight.



The Carpenter screened port lights and Carpenter Steerer are the latest additions to the line of this popular Western marine hardware house

Mianus Diesel Engines

With the growing demand for Diesel type of power for pleasure yachts, the exhibit of the Mianus Diesel Company, 165 Broadway, New York, will be sure to interest the boat owner. The Mianus engine is a full-Diesel type, made in from 1 to 6 cylinders, from 7½ to 100 h.p. It is one of the few Diesel engines that can be had in moderate size for use in medium-sized yachts.

They also have small units which can be used for driving generators, etc. One of these, a 15 h.p., 9 k.w. generating set, will be exhibited.

The advantages of the Diesel are many, among them being great economy in operation. The fuel consumption is remarkably low, the price of fuel alone being less than one-third that of gasoline. In a recent exhaustive test made on an 82-foot yacht powered with 100 h.p. 6-cylinder Mianus Diesel, the fuel consumption chart showed the average consumption of only 7½ gallons per hour at an average price of 5c. per gallon, or only 37½c. per hour to drive a boat of this size. A 70 h.p. 4-cylinder Diesel will be exhibited, and also a small gasoline and kerosene air compressor.

Jeffery's Waterproof Glue

Visitors to the booth of the L. W. Ferdinand Co., of Boston, Mass., will not only have an opportunity of seeing just how a lap strake canoe is made waterproof by the Jeffery Process, but will be handed a free sample of any one of the many kinds of glue manufactured by the Ferdinand Co., in which they may be particularly interested. The complete exhibit will include No. 1 Extra Quality Marine Yacht Glue, for paying deck seams; No. 7, Soft Quality, for canvassing decks and hulls, and for making boats leakproof; Waterproof Liquid Glue, C quality, for use in combination with linen between the veneer of diagonal planking of hydroplanes and seaplanes; Ferdico Seam Filler, and a new waterproof Liquid Glue suitable for cabinet work of yachts, and for hollow spars; and their Ferdico Handy Stop-a-Leak Stick, a Marine Glue in stick form.

The Hall Scott Line

A fine line of highly developed four- and six-cylinder motors will be exhibited by the Hall Scott Motor Car Co., of Buffalo, N. Y. Two of their leaders are the 125 h.p. "Balanced four" and the LM 6-cylinder 200 h.p. machine, both of which have made enviable reputations in Sea Sleds and Bear Cats. The 50-70 h.p. HSM 4, and the 75-100 h.p. HSM 6 motors complete the line. All the products of the Hall Scott Company have many unusual refinements and advanced engineering ideas have won a great deal of praise on account of their smoothness of operation, cleanliness and quietness.

John Alden's Exhibit

A newcomer to the show this year will be John G. Alden, the well-known Boston naval architect, who will occupy a booth on the mezzanine floor. Besides a large number of handsome photographs and plans of Alden-designed craft, he will exhibit a number of models of his most successful boats, including one of *Malabar IV*, winner 1923 Bermuda Race.

Elto Water Scooter

The Elto Twin Outboard Motor

Honolulu's greatest water sport, surf riding or aquaplaning, is now provided for by the Elto Water Scooter. With a speedy, powerful Elto Outboard Motor driving your boat and an Elto Water Scooter in tow, you can enjoy this safe and most fascinating water sport. The engine and the scooter will both be seen at the Motor Boat Show.

The Elto Water Scooter crowns outboard motor use with a new delight. When your boat is idle, you can use the scooter as a raft or diving board. While it rests, it holds 150 pounds of weight without sinking, and in motion, of course, it carries a great deal more weight. It is built hollow, ribbed inside, and of triple canoe construction throughout. The sturdy two-way ribbed frame is covered like the sides of a canoe, first with curved, close-fitting sections of wood, over which is cemented the water-tight canvas. Then completely sealing all, is the waterproof glistening enamel coat. The scooter is light, strong, speedy and safe.

The Elto Water Scooter is distributed exclusively by Elto dealers and by the Elto Outboard Motor Co., of Milwaukee, Wis.

Red Wings—New and Old

Owners of cruisers and commercial boats, as well as the larger sized runabouts and passenger boats, will be especially interested in the showing of the Big Chief 50-60 h.p. and the Big Chief Special 70-90 h.p. Red Wing Thorobred engines at the forthcoming New York Motor Boat Show. The Big Chief 50-60 h.p. engine, having a bore of 5 inches and a stroke of 7 inches, was placed on the market early this Spring, and many successful installations have been made during the past season. The Big Chief Special 70-90 h.p. is an outgrowth of the original Big Chief, and has a bore of 5¾ inches and a stroke of 7 inches. These engines give very efficient service in the medium heavy duty type at revolutions from 600 to 900 r.p.m., and the high speed type engines are capable of speeds up to 1,400 r.p.m.

These engines are of the four-cylinder four-cycle type, and are complete unit power plants with built-in reverse gear, enclosed fly

WRIGHT TYPHOON MARINE ENGINE

"Time and the Passing of the Years . . ."

Virgil

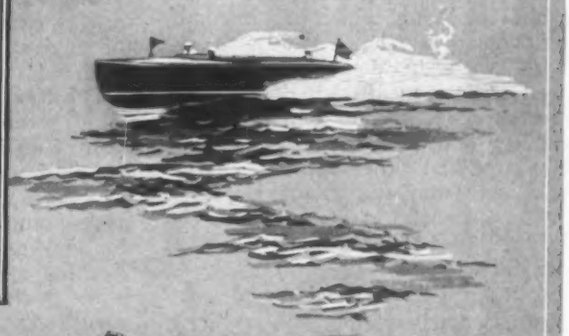
Time is the necessary element in the production of any fine mechanism.

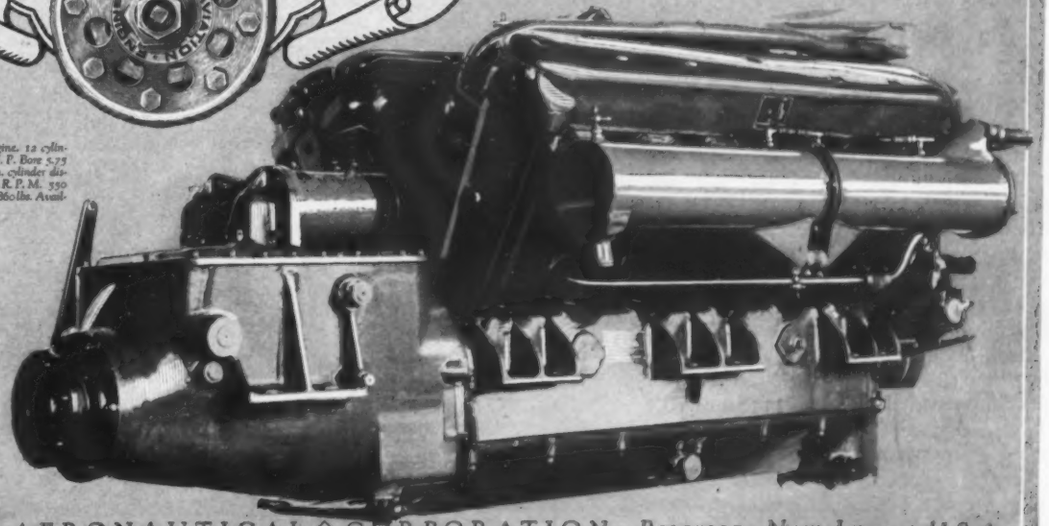
Time—to perfect a capable organization.

Time—to gain by a wide experience in years of production, the necessary fundamentals of quality and performance.

Thus has Wright, in offering the Marine Typhoon Engine for the 1925 season, been preparing and building for the past 25 years for its outstanding success.

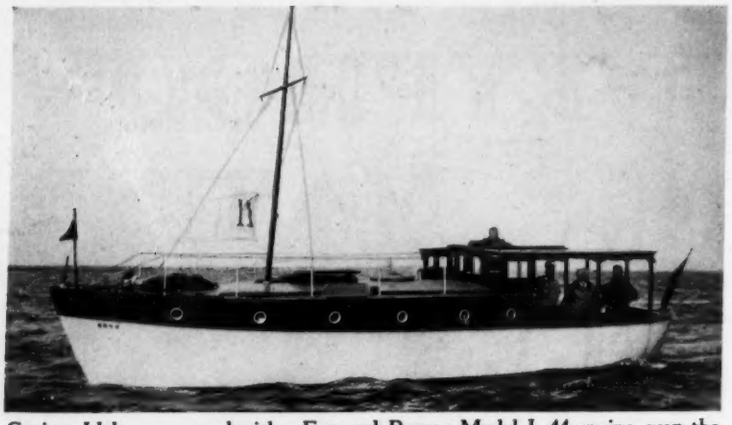
WRIGHT AERONAUTICAL CORPORATION





Wright Typhoon Marine Engine. 12 cylinder, 60 degree V Type, 600 H. P. Bore 5.75 in., stroke 6.25 in. 1047 cu. in. cylinder displacement. 600 H. P. at 2100 R. P. M. 550 H.P. at 1900 R.P.M. Weight 1860 lbs. Available for immediate delivery.

WRIGHT ◇ AERONAUTICAL ◇ CORPORATION, *Paterson, New Jersey, U.S.A.*



Cruiser *Idolour*, powered with a Fay and Bowen Model L-44 engine, won the first prize in the Tamaqua Yacht Club Ocean Race.

wheel, and a two unit twelve-volt starting system. Both the 50-60 h.p. and the 70-90 h.p. sizes are furnished in pairs for twin screw installations, in both right and left hand.

The Red Wing Motor Co. has also redesigned two of its smaller sized engines to bring them strictly up-to-the-minute in every particular. Their popular model AA 18-24 h.p. size, which has been on the market for over twelve years, is improved for 1925 with a new set of cylinder blocks incorporating the detachable cylinder head feature. The model KK 7-8 h.p. double-cylinder four-cycle Red Wing, which is a one-half counterpart of the AA, is also offered with the detachable cylinder head feature, making this one of the most popular fishing and workboat engines on the market. The KK model can be had either with or without base extension and enclosed reverse gear. Bore and stroke of both the KK and AA models shown is 3¾ x 4¾ inches.

Boats and Engines in the Fay & Bowen Exhibit

Fay & Bowen, the well-known engine manufacturers and boat builders of Lake Geneva, will be on hand as usual with two or three completely equipped models of their popular stock runabout, and a full line of their motors. The latter includes the new "Gobest," a 14 h.p. four-cylinder engine with Atwater Kent ignition system; the LN 41, 23 h.p. and the LN 42, 25-40 h.p. with American Bosch magneto; the LN 43, 25-40 h.p. with double ignition and electric starting and lighting set; and the LNS 43 model, 30-50 h.p., with the same equipment.

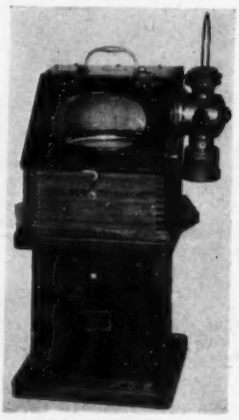
It was one of the Fay & Bowen model L-44 engines which furnished power for the cruiser *Idolour*, which won the Tamaqua Yacht Club ocean race last September. The race was run in very heavy weather, but the engine brought this boat home a winner over a large fleet.

Navigation Equipment for Your Boat

After getting your boat and power plant, the next most important thing is to procure reliable navigation equipment that will enable you to take the boat wherever you may want to go. That's why the exhibit of Kelvin and Wilfrid O. White Company, in booth 79, will attract every visitor to the show. The majority of new boats turned out last year were equipped by this company, and everything in the navigational line can be supplied by them.

They exhibit a full line of compasses, from the small size up to the Lord Kelvin compass, which is the standard of the British Maritime Service. To go with these are binnacles, binnacle hoods and appliances for lighting the compasses at night. Another specialty they are carrying is the Walker Cherub Log, a reliable small log, particularly suited for yacht use.

Sextants, parallel rules, and protractors will also be found in their booth, as well as all of the latest publications on navigation.



Kelvin and Wilfrid O. White binnacle stand for the correction of compass deviation.

Twentieth Century Motors

The New York Yacht Launch and Engine Company, builders of houseboats, yachts and engines, on the Harlem River at Morris Heights, exhibit at the show a number of their famous Twentieth Century Marine Motors of the heavy duty type. Motors of this class are best fitted for use in power houseboats and yachts of the cruising type. The Twentieth Century was one of the first motors on the market and has stood the test of time, improvements being made in it from time to time as the internal combustion engine developed.

The engines exhibited are a 4-cylinder, 50-60 h.p. machine, developing its power at 400 to 500 revolutions, and a 75-100 h.p. 6-cylinder engine, turning 400 to 600 r.p.m. These engines are built to give just as long life as the boat itself.

The New York Yacht, Launch and Engine Company will also show photographs, blue prints and sketches of the line of houseboats in which the company has specialized for many years.

Stearns Engines

Another interesting engine exhibit will be that of the Stearns Motor Manufacturing Company, of Ludington, Mich., who will show a complete line of Stearns Extra Reserve Marine Motors, which they claim represents the most in marine value on the market. The low price at which the Stearns motors are sold is the result of big production under efficient factory conditions.

The engines are suitable for both cruising boats and high-speed craft, the revolutions being from 600 to 1,300. A full list of the Stearns line is as follows:

Medium Speed—600-1,200 r.p.m.
Model MHU—4½" x 6", 30-55 h.p.
Model MDU—5⅛" x 6½", 40-75 h.p.
High Speed—Model MHR—4½" x 6", 80 h.p.—1,000 lbs.
Model MDR—5⅛" x 6½", 125 h.p.—1,300 lbs.

A New Hyde Feathering Propeller

The Hyde Windlass Company, of Bath, Me., makers of the well-known Hyde propellers, have a brand new attraction this year which will interest the sailing yachtsman, and particularly the owners of auxiliaries. This is a new automatic feathering propeller, designed particularly for auxiliaries. The blades, which have

AT THE MOTOR BOAT SHOW

Will be found the *best* productions of the *best* manufacturers of boats and accessories.

Among the new appliances shown for the purpose of adding to the speed, comfort and appearance of any boat, old or new, the

CARPENTER MARINE SPECIALTIES

attract universal attention by their practicability and usefulness.

They are fully described in the

1925
CARPENTER MARINE CATALOG

Which is nearly ready for distribution.

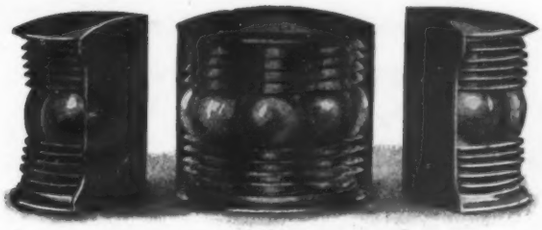
Write for your copy at once.

GEO·B·CARPENTER & CO.
MARINE SUPPLIES
Sailmakers and Riggers
202 W. Austin Ave. Chicago

Improved Carpenter Steerer

G. B. C. Adjustable Strut

Carpenter Post Light For Class 1 Boats



Carpenter Electric Running Lights

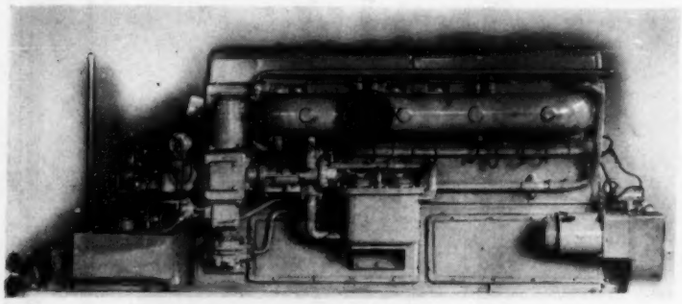
G. B. C. Port Light

about the same diameter and pitch as the regular Hyde wheels, pivot on the hub, being held in place for go-ahead or reverse by lugs. The minute the pressure is released from the blades, as when the engine is stopped or de-clutched, the flow of water past the blades automatically swings them to a neutral position where there is no drag. There are no hollow shafts, sleeves or levers and the wheel is installed in the same manner as a solid propeller. The makers claim that it cannot jamb. It is well worth an investigation by auxiliary owners, who will be convinced of its merits when they see it.

duced by this company within the past several years.

One of the famous Dolphin Special sizes, a 5¾" bore, 6-cylinder engine that pulls over 300 h.p. at 2,000 revolutions, is also on exhibition, and an intermediate type of the same engine is shown in cross section, exposing the interior. A Seagull engine is shown as furnished for a yacht, and another Seagull engine is cut in half longitudinally. This engine will be seen in operation.

The little Neptune, favorite of the high-class fishermen; the Trident Model, preferred for auxiliary cruisers and for the heavier type of boats,



The new Sterling Coast Guard 200 H.P. engine, which will be seen for the first time at the Show.

Sterling Engines in Many Models

Sterling, as always, can be depended upon to enhance the appearance of their exhibit. A great deal of careful thought and expense mark this great exhibit of marine engines at the show.

The engines are all set upon a platform, with a semi-stage effect, about two feet higher than the main floor of the building. This floor is carpet-covered and like a background for a stage setting. Blue velvet curtains and valances cover the wall. Suspended in front of the curtains are twenty-one oil paintings of famous yachts and cruisers powered with Sterling engines—boats that are known in their respective localities as among the finest of the fleet.

Ten engines, enameled gray, setting upon a darker gray carpet, flanked by the dark blue curtains, form the most colorful exhibit at the show. This year a newcomer is added to the Sterling line, the Coast Guard Model, an intermediate size between the famous Sea-Gull and Viking Models of this company. These three models are similar in design, being built with removable cylinder sleeves, in a water-jacket cast the full length of the engine, having overhead camshafts, and, in the two larger sizes, dual camshafts with dual valves in the head; seven bearing crankshafts, counter-weighted; oil coolers and filters and many other features that have been introone of the famous straight eights, built only by this company, are also shown. In fact, a complete line of Sterling engines is on exhibition.

The exhibition is in charge of Mr. C. A. Criqui, Sr., President; C. A. Criqui, Jr., Advertising Manager, and Maurice E. Mutchler, General Sales Manager.

A 14-foot tender powered with Model F-4 Scripps which drives her 30 miles an hour.

Scripps Engines

The exhibit of the Scripps Motor Company, of Detroit, Mich., includes one of the most comprehensive lines of marine motors at the show. The Scripps motors have made such a name for themselves, not only in the past but during the last year when they were found in many of the championship winners, that the line of engines at the Palace will attract unusual attention. The Scripps Company stresses the fact that their engines are not racing engines but are real, durable, usable machines that win speed events by reason of their tremendous power, control and reliability. It is for this reason that they have been chosen to power the fleet of ten 18-foot runabouts built by the Purdy Boat Company and owned by Carl J. Fisher, of Miami.

One of the features of the show will be a little 14-foot yacht tender, built by the Red Bank Yacht Works and powered with a model F-4, high-speed Scripps, which gives her a speed of 30 miles an hour. The full list of Scripps winners of the year includes many of the famous racing events, such as the Junior Gold Cup Championship, the Tamaqua Ocean Race of September 21st, the South Jersey and Delaware River Section Championship event, and others.

A full line of the 1925 Scripps is as follows:

D-2, 10-12 H.P., M.D.; 15-18 H.P., H.S. F-6, 50 H.P., M.D.; 100 H.P., H.S. F-4, 15-40 H.P., M.D.; 40-60 H.P., H.S. E-4, 30-45 H.P., M.D.; 45-70 H.P., H.S. E-6, 40-60 H.P., M.D.; 65-100 H.P., H.S.

The Edson Exhibit

An attractive line of marine appliances will be shown at the booth of the Edson Mfg. Company, of Boston. Their Simplex Steerer, built to meet the demand for a durable, efficient, yet inexpensive steerer, is one of their leaders. Special Exhaust Hose, diaphragm bilge pumps, and many other varieties of accessories will complete a very unusual exhibit.

Textasote and Pantasote

Anyone interested in canvas for awnings, sail covers, spray hoods, bridge screens, deck coverings, etc., should visit the Pantasote Company, at booth 36 on the mezzanine floor of the show, and examine samples of Textasote, the new processed duck—a soft, pliable canvas which is waterproof, does not rot, and far outlasts ordinary duck. Pantasote, the famous artificial leather for cushions and upholstery, will also be shown.

"New Jersey" COPPER PAINT

Top and Bottom Paint for Everything that Floats

SHOW ANNOUNCEMENT

We extend a cordial invitation to our friends to visit our Booth No. 34—Mezzanine Floor—at the Annual
MOTOR BOAT SHOW
JANUARY 2nd to JANUARY 10th, 1925
AT
GRAND CENTRAL PALACE, NEW YORK CITY

Here is what they all say

The Naval Architect

WILLIAM H. HAND, Jr.
NAVAL ARCHITECT
NEW BEDFORD, MASS.

December 31, 1923.

New Jersey Paint Works,
Wayne & Fremont Sts.,
Jersey City, N. J.

Gentlemen:

I am in receipt of your letter of the 26th.

As you know, I have used, "New Jersey" yacht white, "New Jersey" deck paint in special tan color, and some "New Jersey" copper bottom paint for a number of years. They have been very satisfactory.

With best wishes,

Yours very truly,

(Signed) W. H. Hand, Jr.

The Boat Builder

S. B. Norton
BOAT BUILDING AND REPAIRING RAILWAY
Paints and Varnish — Cordage and Marine Hardware

Dark Harbor, Me., Dec. 1, 1924.

New Jersey Paint Works,
Jersey City, N. J.

Gentlemen:—

It is with great pleasure I am writing you in regards to your Yacht White. I have been fitting and sailing yachts for the past twenty years and have used all of the best brands, but can say that your Yacht White is far ahead of any that I have used; it is white and stands up under the most severe tests. I have 52 yachts in my yard this year and practically all of them will be painted with your Yacht White in the spring.

Very truly yours,
(Signed) S. B. Norton.

The Ship Chandler

McKenzie Oerting & Co.
Ship Chandlery, Groceries and General Hardware

Pensacola, Fla., Dec. 14, 1923.

New Jersey Paint Works,
Jersey City, N. J.

Gentlemen:—

Your letter of Dec. 11th received and contents noted. You may say to the World that the "New Jersey" Copper Paint from our experience in using same ourselves and also having sold it in this vicinity of the Gulf for a quarter of a century, we feel confident that there is none better. For many years we have sold several kinds of the various kinds of copper paint on the market and the majority of our customers demand "NEW JERSEY" COPPER PAINT.

We trust this is sufficient to explain our idea in connection with your letter.

Wishing you a Merry Xmas and a prosperous New Year, we remain,

Yours truly,
McKENZIE OERTING & CO.
(Signed) W. S. Oerting, Manager.

Write for the booklet DAVY JONES LOCKER giving valuable information on painting, sent without cost to you

Paint and Varnish Makers Since 1889

New Jersey Paint Works

HARRY LOUDERBOUGH, Inc.

Wayne and Fremont Sts. **JERSEY CITY, N. J., U. S. A.**

Baby Bootlegger, equipped with Wright Gold Cup Engine, 240 H.P.

Wright Gold Cup and Typhoon Model High-powered Engines

A new series of complete power plants for high-speed boats has entered the marine field, being the product of the Wright Aeronautical Corporation of Paterson, N. J. These form one of the most interesting exhibits of the year at the show.

The *Baby Bootlegger*, winner of the Gold Cup last September, and the power plant which shoved her nose in ahead of all other contestants, occupies a prominent place in the Wright booth. This boat was built by Henry B. Nevins, of City Island, for Mr. Caleb Bragg, who piloted her in the race, where she maintained an average speed of 45.3 miles for the entire 90 miles. This phenomenal speed was instrumental in bringing back the famous Gold Cup to the East after a long absence.

The *Baby Bootlegger* is powered with the new Wright 240-h.p. engine, which, due to its performance in this race, has been designated by the Wright Company as the Gold Cup engine. The guaranteed power is, however, far below the peak of its output. No better word could be spoken for its durability, according to Wright engineers, than the fact that it made the three heats of the Gold Cup race without any attention to the engine. The fuel and oil consumption per h.p. is very low, and since the valves do not require grinding nor the carbon removed during an average season's use, service charges are extremely low. This Gold Cup Engine is an 8-cylinder machine, 90° V-type, water cooled, with a bore of 4.4" and has a stroke of 5.1", the cylinder displacement being 624 cubic inches. It develops its 240 guaranteed h.p. at 2,300 r.p.m.

Another interesting feature of the Wright exhibit was that of the Wright Typhoon, a 600-h.p. marine engine especially developed in response to the demand for a much greater power output than has been previously available in a single engine unit for express cruiser and runabout service. To meet this demand it was necessary that the power plant be smooth in operation, extremely reliable and very light. The Wright Typhoon is a 12-cylinder 60° V-type engine, and has proven itself capable of operating for long periods at very high speed. The bore is 5.75" and stroke 6.25", displacement 1,947 cu. in. It develops its power at 2,100 r.p.m.

This engine made an enviable record in the speed boat *Teaser*, owned by Mr. Richard F. Hoyt, of New York, and used by him during the past summer and autumn for commuting to and from points on Long Island, and for week-end service to his country place at Marion, Mass.

Palmer Has a New One

Besides their full regular line of eighteen motors, ranging from a single-cylinder 2½ h.p. to a six-cylinder 75 h.p. model, Palmer Bros., of Cos Cob, Conn., will exhibit a new 4-cylinder machine, to be known as Model ZR-4. This will be a semi-speed motor, 5½" bore and 6" stroke, T-head, with removable cylinder heads, developing between 35 and 40 h.p. It will be equipped with two-unit self-starter, double-ignition system, monel metal exhaust valves, compression relief, and a new type clutch, known as "double disc." This clutch is enclosed, runs in oil, has simple adjustment, a velvet grip and a high ratio of reverse. It will be shown at the show as an independent gear, suitable for any motor developing between 25 and 60 h.p.

Snowdon Boats, an 18-foot Runabout and an Ice Boat

The Bergh Boat Corporation have an interesting exhibit of a wide variety of boats and engines. One of the new boats which will be seen at the show is an 18-foot Cape Rozier Runabout, designed by W. H. Hand. This boat makes 17 miles per hour with a Model-Z Gray Motor, and is one of the "buys" of the show at $985. She is handsomely finished and makes a snappy little runabout for the man who desires a fair turn of speed.

Another boat that will take the eye of the sailing man is a 14-foot Snowdon sailing dinghy, built of mahogany and trimmed with the same wood. This is an unusually roomy and stiff little craft and would make a fine boat for a one-design class or for youngsters learning to sail. She has a lug rig and can be reefed by merely winding the sail up on the boom.

The Bergh Boat Company will also exhibit several types of outboard motors for which they are the agents, and three outboard motor skiffs, 10, 12 and 14 feet in length. They will also show a number of model yachts, among them a 32-inch schooner.

Barnegat Bay Sneak Boxes and Cats

J. H. Perrine, of Barnegat, N. J., will again exhibit his standardized Barnegat Sailing Sneak Boxes and several models of catboats and sloops.

The Barnegat Sneak Boxes are very popular not only on the Bay, but wherever shallow water makes a centerboard boat necessary. They are decked over, are fast and able, and are used for one-design classes or are ideal for the beginner or for knocking about generally. J. H. Perrine builds all of his models in stock, and can furnish any of them on short notice.

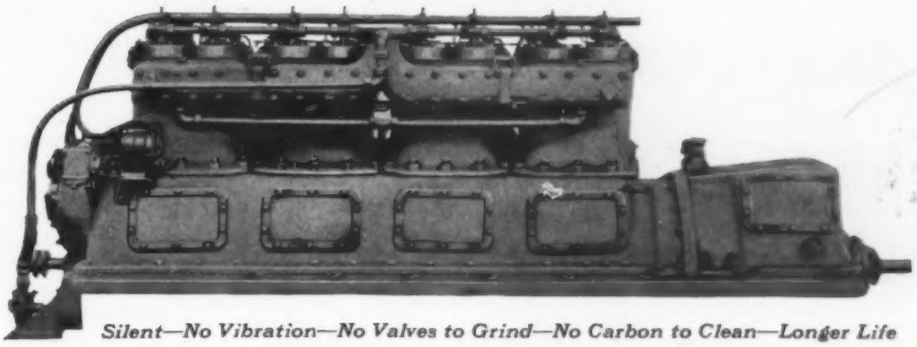
Smith Varnishes and Enamel Paints

Edward Smith & Co., long known as makers of high-grade varnishes and paints, have a novel exhibit which shows the visitor one of the hardest tests a varnish was ever given. This test consists of a wire mesh cage or box coated with two coats of Smith's Cup Defender Varnish. The box is filled with water, which is kept boiling by means of two electric heating elements. Thus nothing but the varnish holds the boiling water in the box.

In addition to this there will be a new and novel test on Escolac, the weather-proof, colorless lacquer, consisting of a continuous stream of water running down a brass tray, one-half of which has been lacquered and remains bright, the other half being badly tarnished from the water and exposure to the elements.

There will also be many handsome varnish and enamel panels to be seen, together with other hard fossil gum marine products.

LOEW-KNIGHT ENGINES



Silent—No Vibration—No Valves to Grind—No Carbon to Clean—Longer Life

Silent Knight Engines Now Available for General Marine Service

Now, for the first time, the Knight sleeve-valve type of engine is available for general marine service. This is made possible by an exclusive license, recently secured by this company, to build and sell the LOEW-KNIGHT MARINE GASOLINE ENGINE—the most efficient, smoothest-performing, most durable, marine gasoline power plant ever built. The LOEW-KNIGHT, because of its fundamentally different design, eliminates inherent faults of other types—faults that marine engineers have tried for years to overcome—without success.

SILENT-SMOOTH. Silent sliding sleeves eliminate completely the noise of pounding valves. Performance in actual service proves that no other type of marine gasoline engine now known will perform as smoothly at all speeds as the LOEW-KNIGHT.

NO VIBRATION. Vibration is eliminated completely. Vibration means annoyance, expense, and shorter life for the engine. No other type of marine gasoline power plant does away with vibration completely. AND THE LOEW-KNIGHT DOES.

NO VALVES TO GRIND. Grinding of valves is eliminated. LOEW-KNIGHT sliding sleeve-valves never have to be ground. They never even have to be adjusted.

NO CARBON TO CLEAN. In the LOEW-KNIGHT, carbon promotes, rather than impairs, the engine's efficiency and smooth performance, by providing a closer fit than human hands can secure. This means better compression and greater power, exactly the opposite of what carbon means in other types of engines.

LONGER LIFE. Because the LOEW-KNIGHT is a superior, smoother-performing, more efficient engine, it will outlive other types by many years. This too, has been proved in actual service.

A PROVED SUCCESS. The LOEW-KNIGHT engine is tried and tested—a proved success—demonstrating all that we claim for it in years of hard service. Compare this engine, point for point, with any other gasoline engine. Better than that, see the LOEW-KNIGHT in action. Made in various sizes from 50 H.P. to 300 H.P., both heavy duty and high speed. Further details gladly supplied upon request.

See our representative at the Motor Boat Show, New York City

THE LOEW MANUFACTURING COMPANY

Sole Licensee and Manufacturer of Knight Marine Engines

Madison Avenue and West 90th Street, N. W. Cleveland, Ohio, U. S. A.

The Welin Runabout Dragon

The Welin Davit & Boat Corporation of Long Island City are exhibiting at the show their new runabout *Dragon*. It is the effort of Welin to obtain and give to the boating public something better than the ordinary at a reasonable price. Harry F. Sailor, Vice-President of the Company and designer of the *Dragon*, has, we believe, succeeded in his efforts. The *Dragon* should prove popular with the lovers of good motorboats who heretofore have been unable to enjoy real comfort on account of the high prices which usually prevail on high-grade boats.

The Welin Davit & Boat Corporation 25-foot runabout, *Dragon*.

Though sturdily built, the *Dragon's* weight is low, due to the many refinements in design and the excellent character of workmanship. In the construction of the keel and frame will be seen much of the old-fashioned type of boat building, combined with modern design.

The *Dragon*, with accommodations for ten people, is 25′ 6″ long overall and 6′ beam. She is built of mahogany with white oak keel and ribs. The motor is a Scripps F4 40-60 H.P., which gives the craft a speed of 18 to 20 miles.

A New Frisbie "Four"

Among the notable new motors for 1925 is the new Frisbie S-4, which will be shown for the first time at the show. The thought back of this engine was to build a machine that would develop an honest 20 h.p. at very moderate revolutions, and offer it to the public at a price that would give the purchaser an excellent return on his investment. The new motor is of four cylinders, 4″x5″, cast *en bloc*, valve-in-head, detachable head, and is fully enclosed throughout. Crank case and oil pans are separate castings. Bosch magneto, impulse coupling, heavy bronze gear water pump, and special Paragon reverse gear are other features of an exceptionally clean-cut, well-designed, handsome motor all around.

In addition to the new S-4, the following famous Frisbies will be shown: Model FA-1, 5-7 h.p.; FC-1, 8-10 h.p.; FB-2, 2-cylinder, 10-14 h.p.; FE-4, 4-cylinder, 30-40 h.p.; FF-4, 4-cylinder, 40-60 h.p., and the model TS-4, 4-cylinder, 100-125 h.p., dual valve, detachable head.

Besides their motors, the Frisbie will exhibit three model yachts built to exact scale, in the original of which Frisbies were installed. A table and rack of service parts for all Frisbies will complete the exhibit.

New Jersey Paints

The New Jersey Paint Works will display a complete line of their bottom paint "for everything that floats." The New Jersey Copper Paints for the bottom of boats have long been known for their high and anti-fouling qualities. They are used by racing boats and cruisers, where it has always given satisfaction. Another specialty of the New Jersey Paint Works is their Yacht White. They also have a number of deck paints, especially one in tan color, which is exceedingly popular.

The company puts out a booklet called "Davy Jones Locker," giving valuable information on yacht painting. This may be had at the show or by writing to the New Jersey Paint Works. The company also is issuing to its customers and friends an unusually handsome calendar with a colored reproduction of the old Line-of-Battleship *Pennsylvania*, one of the famous craft of our old navy. By calling at Booth 37, where the Company exhibits, users of New Jersey Paints will have an opportunity to meet those who make them.

A Luders Red Wing and Power Launch

The Luders Marine Construction Company will exhibit both a sail boat and a power boat at the show. The former will be one of the company's 16-foot keel sloops, called the *Red Wing*, a boat of this type being the hit of the show last year. This little yacht has a beam of 5 feet and a draft of about 3½ feet, with outside ballast. She is a real little yacht in every particular, and in construction and finish comes up to the usual high standard of this company.

The other boat is an 18-foot power tender which they have built as a launch for a 100-foot power cruiser they are building for Colonel Samuel Nicholson, of Providence. This boat is a combination of the round and V-bottom type, very much like the Admiral's barges which the Luders Company built for the Brazilian Navy a few years ago. She is an unusual little boat and her design and construction will be studied carefully by those interested in power-boat design. She is powered with a Red Wing Motor and will have a good turn of speed.

Many Improvements in 1925 Evinrudes

With the growing popularity of the outboard motor, the display of the Evinrude Motor Company, one of the first firms to manufacture this type of machine, will be especially noteworthy. Interest will center about the two-cylinder model, known as the Sport Twin, the latest Evinrude creation. Alive with power, it is yet light in weight, flexible, smooth and quiet, and embodies such exclusive features as a new flywheel magneto, new auto-type carburetor, new safety reverse and safety tilt-up. The old reliable single-cylinder, with many improvements, will also be shown.

Elco Cruisers

One of the largest exhibits of cruisers at the show will be that of the Elco Works, Bayonne, N. J., and New York City. One of the boats will be in the Palace proper and the others will be exhibited at the Elco Show Rooms in the Palace building, and with a separate entrance from the floor of the Palace to the Show Room.

The boats exhibited will be the 30-foot *Vedette* day cruiser and runabout, the 34-foot *Cruisette*, the 45-foot Elco cruiser and, as usual, the big 56-foot Elco cruiser, the latter being the largest boat exhibited at the show. The *Vedette* is primarily a handy day boat with a speed of 15 statute miles, developed with an Elco 4-cylinder, 47-h.p. motor. She also has a small cabin with two berths, toilet room, lavatory, and galley, suitable for a week-end or for short cruises.

The *Cruisette* is too well known to need much of a description here. Some slight changes have been made in her for this year, these including a windshield protecting cockpit and some slight interior changes. This little boat accommodates four persons, giving each a separate berth, and has every facility for cooking and living aboard. The power plant is a 42-h.p. Elco engine which gives her a speed of 12 miles an hour.

The Wamsutta balloon jib on The WILDFIRE—C. L. Harding, owner, Boston, Massachusetts. Balloon jib by Herreshoff.

In Light Airs

WHEN C. L. Harding needed a balloon jib for The Wildfire, Wamsutta Yacht Duck was specified.

Closely woven, light yet very strong, Wamsutta in the lighter weights is perfect for this important sail: stout, for heavy duty—so fine it fills to the lightest airs.

If you are not ready this season for a complete new suit of sails, try a balloon jib or a spinnaker of Wamsutta.

Ask your sailmaker for a sample or write to

HOWE & BAINBRIDGE

Distributors

220 Commercial Street Boston, Mass.

Made in All Weights for Boats of Every Size

WAMSUTTA YACHT DUCK

Made in America for American Yachts

WAMSUTTA MILLS, New Bedford, Mass., *Founded 1846.*—RIDLEY WATTS & CO., *Selling Agents,* 44 Leonard St., N.Y.

The 45-foot cruiser is one of the most popular of the boats turned out by this company. She is large enough for extended cruising and may be used also as a day boat without the expense usually attached to a boat of this size. She has an owner's stateroom aft, with plenty of stowage space, and comfortable forward cabin.

Tiebout for Marine Hardware

At booths 19 and 20 at the Motor Boat Show, W. & J. Tiebout will show regular and special items from one of the largest and most complete stocks of marine hardware ever assembled by any dealer in marine equipment. Boat builders, boat owners, and those intending to build are sure to find many items of interest in their comprehensive display of the best and latest in the marine hardware line.

Ovington's Yacht China

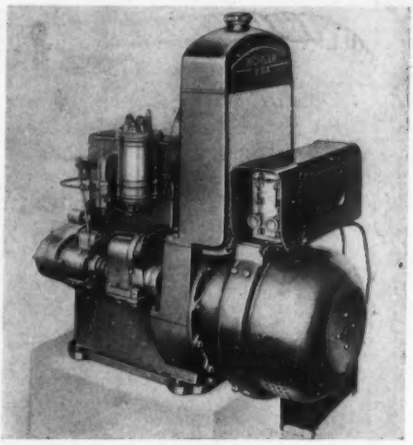
Visitors to the booth of Ovington Bros. are sure to appreciate the display of special yacht china exhibited by this well-known firm. Attractive sets, specially designed for individuals, are distinctive and pleasing, and add much to the pleasure of both owner and guests. A survey of the samples shown by Ovington's will show the yacht owner a few of the attractive designs which this firm turns out at moderate cost.

Electricity Aboard Yachts Without Storage Batteries

Every comfort and advantage of city electricity without the use of storage batteries is made possible aboard power cruisers, auxiliaries or houseboats by an advanced type of light and power plant offered by the Kohler Co., Kohler, Wis.

Standard 110-volt direct current —"city juice"— is developed by the Kohler Automatic, making it possible to use any of the regular home and shop appliances aboard ship. The plant is air or radiator cooled, so that it may be used when the boat is hauled out for storage or repairs. By reason of this feature it may be installed without regard to the waterline, and without installation of a water intake.

The Kohler plant differs in principle from other units in that the current is supplied direct from the generator, and is tapped by simply turning on any light, or plugging in any appliance, anywhere in the ship. This "press-the-button" convenience is gained by the use of an automatic switch which cranks the engine, using the generator as a starting motor. A small starting battery of the automobile type cranks the motor and



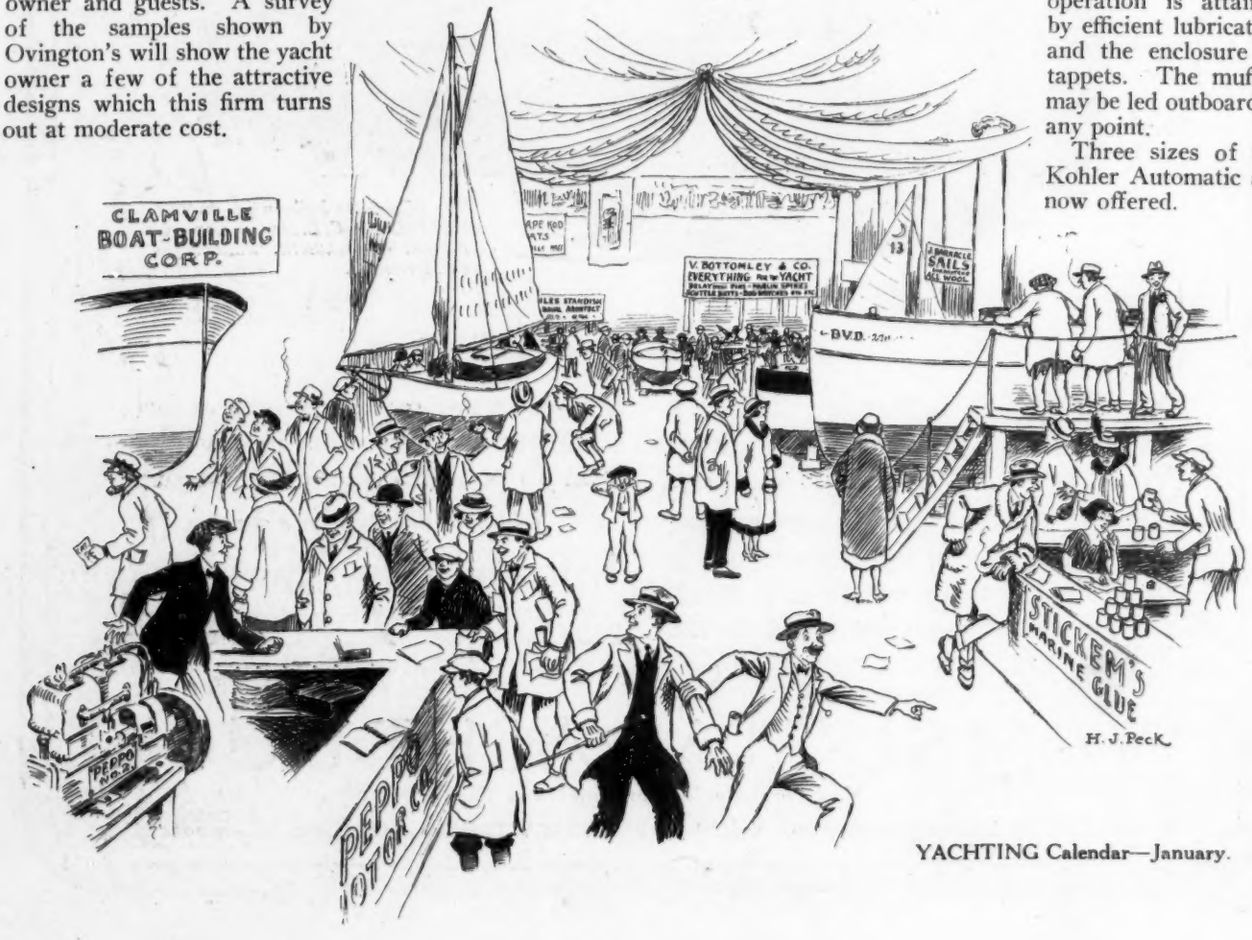
Model D, 1500-watt Kohler automatic lighting plant.

replaces the 16 cells required for ordinary low-voltage current, or the 56 cells which would be required for 110-volt current with a battery plant.

The lights are bright and steady at all loads. This is achieved by means of a positive and quick-acting governor operating directly upon the throttle valve of the carburetor. This governor also tapers the consumption of the fuel to the load.

The generator, which is integral and built in, is driven by a small four-cycle gasoline engine of overhead valve type. Remarkably silent operation is attained by efficient lubrication and the enclosure of tappets. The muffler may be led outboard at any point.

Three sizes of the Kohler Automatic are now offered.



YACHTING Calendar—January.

ALDEN YACHTS

In 1923 the "MALABAR IV," designed by J. G. Alden, won all the races in which she sailed, including the combined class cup in the Bermuda Race besides the cup for her own class.

In 1924 "MALABAR V" came out, 49 feet overall, and, although an auxiliary with a speed under power of 8 miles per hour, she proved herself fast and very able, winning by comfortable margins the eight races in which she sailed, her only dangerous competitor being other Alden-designed boats.

The performance of these, and other similar schooners, ketches and yawls, proves beyond doubt the superiority of the semi-fisherman type for general cruising and long-distance racing. The type produces a boat that does not sail on its side in moderate weather, having accommodations at a minimum up-keep expense, together with a remarkable re-sale value.

MALABAR V.

The "MALABAR VI" is now under construction. She will be 52 ft. O.A., 38 ft. 2 in. W.L., 12 ft. 2 in. beam, 7 ft. 4 in. draft. Four duplicates are also building, two of which are available for spring delivery. Over 25 sailing yachts of this type are now under construction from Alden designs. If you are interested in building, your correspondence is invited.

JOHN G. ALDEN

148 STATE STREET Telephone Richmond 2318 ROOM 815
BOSTON, MASS.

HERE IT IS ! !

A real marine engine for open boats, small cruisers, launches, tenders—boats from 16 ft. to 32 ft. in length. 4 cyl., 4 cycle, 9 to 15 H. P. "SPECIAL."

SUPERIOR ENGINES FOR EVERY TYPE OF BOAT

TWO, FOUR OR SIX CYLINDER

12-14 H.P. 25-35 H.P. 40-60 H.P. 80-120 H.P.

SEND TODAY FOR CATALOGUE
(State power you are figuring on)

NIAGARA MOTORS CORPORATION
BOX Y DUNKIRK, N. Y.

Kelvin & Wilfrid O. White Co.

112 State St., BOSTON
38 Water St., NEW YORK
111 Commissioners St., MONTREAL

Complete Navigating Equipment for the Yacht

The Pedestal Binnacle on the right has a hurricane proof-oil light that will stay lighted.

It is arranged for compensation Has sighting lines for quick bearings. Uses very little cockpit space. Is substantial, good looking and practical.

Made in 5″ and 6″, sizes. Height to suit location.

OUR EQUIPMENT IS STANDARD

See our exhibit— Space 79 — at Motor Boat Show

Via CUNARD to WINTER PLAYGROUNDS

to the WEST INDIES

All the comfort and luxury of Cunard ocean travel—the renowned accommodations, equipment, cuisine, service—may be enjoyed on two delightful 30-day

Caribbean Cruises

sailing from New York, Jan. 22, and Feb. 24, 1925, on the oil-burner TUSCANIA of the Cunard and Anchor Lines.

Most comprehensive itinerary including: Havana, Kingston, Colon, Cartagena, Curacao, La Guayra, Port of Spain, Barbados, Martinique, St. Thomas, San Juan, Nassau, Bermuda.

Interesting and leisurely sightseeing ashore.

to EGYPT

By the MAURETANIA. This far-famed liner, an oil-burner and one of the world's most commodious, comfortable and up-to-date ships, will sail from New York Feb. 17, 1925, on a special trip to Egypt via Mediterranean ports.

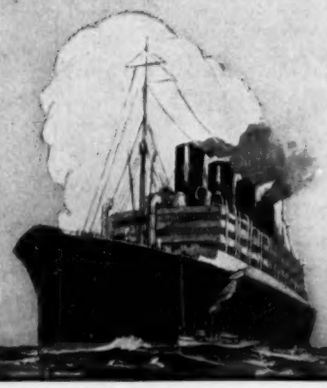
An opportunity unexcelled

to enjoy the inimitable Cunard service and cuisine while traveling to the land of the Pharaohs for the Egyptian Season, with ample time to visit many of the most interesting Mediterranean points en route.

Ports of call: Madeira, Gibraltar, Algiers, Monaco, Naples, Athens, Haifa and Alexandria.

Round trip tickets returning via North Atlantic

Cunard and Anchor Lines



25 Broadway New York

or Branches and Agencies

New Winton-Diesel Yacht from Tams and King's Design

One of the most interesting and incidentally the first of the 1925 fleet of Diesel yachts is being built from Messrs. Tams & King's designs and under their supervision for Commander J. K. L. Ross, of Montreal, Canada, by the Ditchburn Boat Works. She will embody many novel features and we hope at a later date to be able to print a full description of her.

This firm, by the way, after being for twenty-five years or more at their present location, 52 Pine Street, will, after the first of May, 1925, have offices in the new Postum Building at 250 Park Avenue.

Carol—An American Double-Ender

(*Continued from page* 45)

that is fine for a boat that is to be frozen in the ice, but it certainly does subtract a lot of room from the cabin, particularly from floor space. A boat built according to American standards will be, for American usage, fully as able, and far more comfortable and livable, than these Scandinavian log cabins.

Carol's engine room has full headroom under a trunk well lighted with ports on all four sides. Besides an abundance of stowage and working space and fuel tanks, this compartment contains two pipe berths. As the boat will be handled under power from the midship cockpit, entrance to the engine room is from this point. All controls will be brought up on deck. The engine is to be a 35-50 Kermath, which is, of course, very liberal power for such a boat. It is the intention to operate it as a rule at 700 revolutions, delivering 24 h.p., but on the up-river part of the cruise, an ample reserve of power for bucking the current is desired.

The accommodations forward speak for themselves. There is every comfort and privacy for two couples. The toilet is accessible from either cabin. The galley stove is placed where it can be useful in keeping the cabin warm, for the cruise is to extend over fall, winter and spring. Don't let anybody tell you that a bit of fire isn't very comfortable on many winter nights in Florida waters.

Peri—A Butterman Schooner

(*Continued from page* 51)

than when the greatest beam is all in one vertical section.

The topsail schooner rig shown is a scaled sail plan, but was shaded up a little to show what such a schooner looked like under sail. The dimensions of *Peri* are 85 feet waterline, 101 feet over all, 20 feet beam, and 10½ feet loaded draft.

THE GORDON 35-FOOT SPECIALIZED CRUISER

Gordon Deep Sea Cruiser made fastest time in long distance ocean race in worst seaway in which this race was ever run.

ON EXHIBITION AT THE MOTOR BOAT SHOW

Experienced yachtsmen whose tastes demand the best consider the Gordon 35′ one-man Specialized Cruiser to be the most distinctive 100% cruiser now being offered to yachting enthusiasts. Gordon Specialized Cruisers have demonstrated their unusual seaworthy qualifications on innumerable occasions. They have been subjected to extraordinary weather conditions and have always come through with flying colors. When purchasing your boat buy one of positive merit, proven structural strength. Visit our Booth 2B at the Motor Boat Show and convince yourself by inspecting this cruiser from stem to stern.

Gordon Boat Building Company
214th Street and Harlem River
Wadsworth 3881-3882 NEW YORK

"NAYADA"

Champion "R" Class Yacht of The Great Lakes

designed by

T. B. F. BENSON

designer of the "YOLANDA," Royal Canadian Y. C. one design Class, etc., etc.

11 Leader Lane **Toronto, Canada**

The Hotel BERMUDIANA

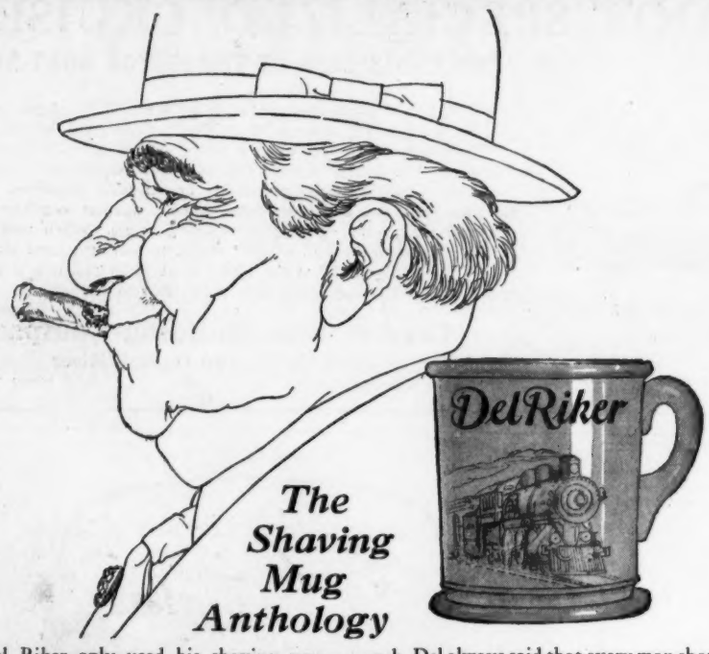
Bermuda's newest and most modern hotel is now the center of its social life. A continuous program of original entertainments— unexcelled dance orchestra.

A steel-and-stone fireproof structure situated in extensive tropical gardens, overlooking Hamilton Harbor. All outdoor sports, all winter. Opens January 16.

For booklet, write John O. Evans, Manager, The Hotel Bermudiana, Hamilton, Bermuda, or Furness Bermuda Line, Desk "B," 34 Whitehall Street, New York.

Diesel Powered 86-ft. Cruiser Designed and Built for Frank B. Stearns, Esq., Cleveland, Ohio, by the

LUDERS MARINE CONST. CO. **Stamford, Conn.**



The Shaving Mug Anthology

Del Riker only used his shaving mug—the one with the locomotive on it—every other Saturday night, when he came home from off the road to spend Sunday with the missus, so Silver Niles kept it handy and within easy reach on the lower shelf of the rack. Del always said that every man should forget about business once in a while and get acquainted with his family, so he loafed around the Commercial House all day Sunday swapping stories with Proprietor Luke Nading and the Sabbath-bound drummers.

Do You Shave in Pullmans or Hotels?

If any one man appreciates Barbasol more than another, it is he who lives most of the week in a traveling bag.

He carries the simplest yet the most efficient shaving kit in the world—a razor, a tube of Barbasol, and perhaps a strop.

He has no shaving brush to rinse out and pack when it is still damp, for Barbasol is spread on with the finger-tips.

He has no need for after-shaving lotions or talcum powder, for Barbasol leaves the face smooth and cool without them.

In crowded Pullman washrooms, he does not linger over the washbowl while others fret and wait their turn. He merely washes his hands and face there before moving aside to spread Barbasol on his *wet* face and to shave.

He shaves with fewer and more even strokes, in half the time, and with hot water or cold. He has no soap to tease into a skin-drying lather. He wastes no precious minutes over the tedious rub-in.

He just shaves quickly and without razor "pull," and revels in the shaves he gets.

For Barbasol holds each hair erect for the razor's edge—this lather cannot do—and softens the beard as well.

Barbasol is sold by druggists in 35 and 65 cent tubes, or a trial tube is yours for filling out the coupon.

Barbasol

no soap no brush no rub-in

The Barbasol Co.
Indianapolis, Ind.

I want to give Barbasol a fair trial. Please mail me your free trial tube.

Name.....

Address.....

Yachting—1-25

A Typhoon in the China Sea

(*Continued from page* 36)

chorage. Current going so strong could not move us. Day ends calm.

October 15th. At 2 P.M. light easterly breeze. Set all sails and hove up. Gunboat took our hawser and at six got us into a good anchorage in six fathoms, soft mud, with fair shelter from N. W. to E. At 6 P.M. he took my letters and kindly started for Hong Kong. At 10 P.M. fresh from N. E., squally and rainy. Middle part the same. Last part, fresh N. E. gale. Continual squalls and rain. Barometer, 29.90. All hands employed getting a spare topgallant mast ready to send up for a maintopmast, and sending down cross-jack yard to use for a main yard. Thus ends this day. Gunboat left me one dozen repeating rifles, with 60 rounds of ammunition for each, and one dozen cutlasses, for protection against pirates, this being a very dangerous place for them.

October 16th. Laying at anchor in Hawcheuen Bay. This day commences strong N. E. gales, continual rain, with hard squalls, a short, bad sea rolling in and ship rolling badly at times when hawsing to windward with the current, making it impossible to get any spars aloft. Four P.M., barometer falling to 29.75 and the squalls increasing. Paid out to 50 fathoms. At 7 P.M. gale steadily increasing and squalls coming very heavy. I begin to think we are to have another typhoon. At 8 P.M. barometer 29.60. Let go second anchor and payed to 75 and 80 fathoms. At 10, barometer 29.55, wind steadily increasing with fearful squalls and rain with very sharp lightning. Ship in trough of sea, filling decks and rolling tremendously. Midnight, weather breaking and canting easterly. Four A.M., hard gales from east. Barometer rising rapidly to 29.70. Last part moderating and sea dropping. This is a most trying time. Ship rolls so heavily it is almost impossible to do anything on deck or aloft. I am well discouraged and disheartened, and wish I had never taken command of this unlucky ship; yet I trust and hope for the best, and that a kind, overruling Providence will yet get me out of this unfortunate scrape with credit to my owners and self.

October 18th. Day begins calm and smooth. All hands employed at jury rig. Got spare lower main topsail yard fitted for mainyard and cross-jack yard for lower main topsail yard; so now, thank God, I think I can make sail enough to work up. If assistance does not come in the morning, shall get under way. At dark, got mainsail bent. Numerous

DEPENDABLE MARINE PLUMBING FIXTURES

FIRST COST REASONABLE - UPKEEP NEGLIGIBLE

Plate F-1070 (Patented)

Plate F-580

Plate F-599

Plate F-1057 (Patented)

Plate F-1070—The "Frisco" 3" pump closet. A sturdy fixture for heavy duty and the best fixture ever produced for the money $95.00

Plate F-580—The "Menard" vitro adamant 14" one-piece lavatory with nickel-plated brass compression faucet. Chainstay chain and stopper. Nickel-plated trap $26.00

Plate F-599—The "Mono" vitro adamant one-piece corner lavatory, 12" on sides with nickel-plated pump, trap, chainstay chain and stopper $34.00
Same, except 14" on sides.....$35.50

Plate F-1057—The "Spedit" 2½" pump closet, finished white, nickel-plated trim, oak woodwork; especially designed for speedy craft. A lightweight and compact fixture.....$87.50

Plate F-420—The "Hobron" vitro adamant folding lavatory with nickel-plated combination faucet for hot and cold water. The most sanitary folding lavatory made.....$80.00

Plate F-621—All metal lavatory. Made to order only in nickel-plated copper or nickel silver. Shaped to template if necessary. (Prices upon application.)

Plate F-1465—Porcelain enameled inside cast-iron flat rim sink. Made in numerous sizes. (Prices upon application.)

Plate F-400—The "Glenwood" folding lavatory with nickel-plated copper lining, nickel-plated pump, vitro adamant basin and nickel-plated trimmings. Oak, $75.00; mahogany.....$80.00
A splendid high quality fixture.

Plate F-1685—All brass, galley-dresser pump with galvanized iron gearings, polished brass faucet. Size: 2", $14.00; 2½".....$18.50

Plate F-1065—The "Iowa" 4" pump closet. An efficient fixture requiring four to five strokes only to cleanse bowl of contents. Finished in white enamel, nickel-plated trimmings, oak woodwork $122.50

Plate F-1060—The "Knockabout" 2½" pump closet, oak woodwork, polished trimmings.....$65.00
This fixture has been the world's standard of its class for 40 years.

Plate F-1040—The "Florida" 4" pump closet, finished white, nickel-plated trimmings, mahogany woodwork.....$145.00

Plate F-1045—The "Huron" 5" pump closet, finished white, nickel-plated trimmings, mahogany woodwork.....$265.00
(Made to order only).

Plate F-2020—"Granby" seacock with three hull connection. Made for intake and discharge of closets in sizes ranging from ¾" up and for planking up to 2" thick. (Prices upon request.)

Plate F-1703—All brass pump for filling or discharging contents of bath tub, finished white enamel with nickel-plated trimmings $49.00

Plate F-420
(Design Patent)

Plate F-621

Plate F-1465

Plate F-400

Plate F-1685 Plate F-1703

IMPORTANT

All openings through hull below water line should be fitted with "Sands" Seacocks. "Correctly made."

A. B. SANDS & SON CO.
22-24 Vesey St. New York, N. Y.

Plate F-2020

Plate F-1065 (Patented)

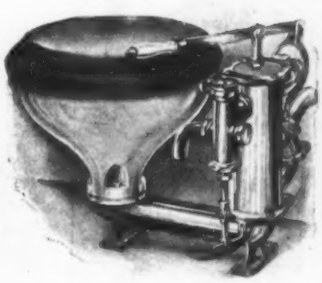
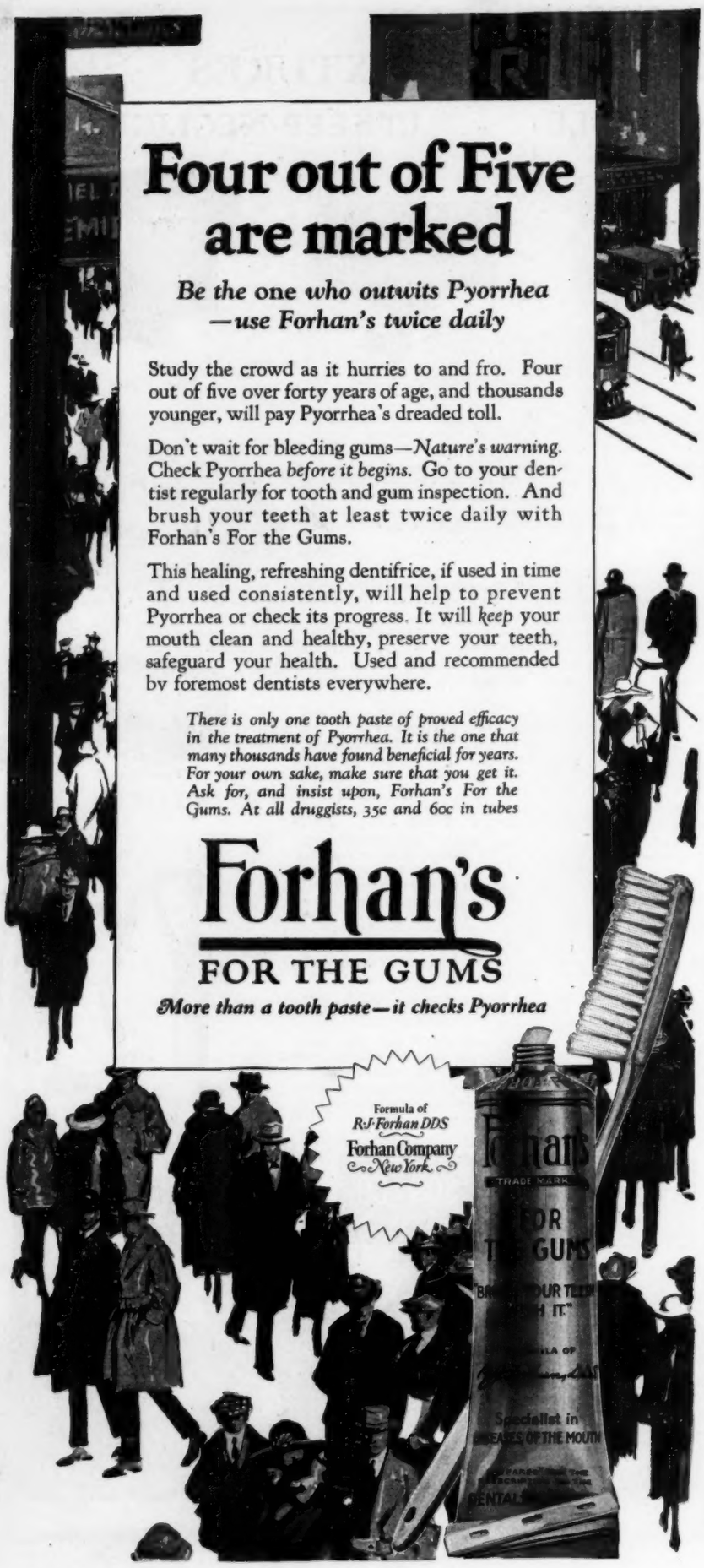


Plate F-1060 (Patented)

Plate F-1040 (Patented)

Plate F-1045 (Patented)


Four out of Five are marked
Be the one who outwits Pyorrhea —use Forhan's twice daily
Study the crowd as it hurries to and fro. Four out of five over forty years of age, and thousands younger, will pay Pyorrhea's dreaded toll.
Don't wait for bleeding gums—Nature's warning. Check Pyorrhea before it begins. Go to your dentist regularly for tooth and gum inspection. And brush your teeth at least twice daily with Forhan's For the Gums.
This healing, refreshing dentifrice, if used in time and used consistently, will help to prevent Pyorrhea or check its progress. It will keep your mouth clean and healthy, preserve your teeth, safeguard your health. Used and recommended by foremost dentists everywhere.
There is only one tooth paste of proved efficacy in the treatment of Pyorrhea. It is the one that many thousands have found beneficial for years. For your own sake, make sure that you get it. Ask for, and insist upon, Forhan's For the Gums. At all druggists, 35c and 60c in tubes
Forhan's
FOR THE GUMS
More than a tooth paste—it checks Pyorrhea
Formula of R.J. Forhan DDS
Forhan Company New York
Specialist in DISEASES OF THE MOUTH

junks around. Thus ends another day.

October 19th. Commences with light N. E. breezes and fine. At daylight bent maintopsail and hove short. Loosed sails and knocked off to breakfast. At 8:30 steamer reported coming from the eastward. Nine-thirty, spoke me. I went on board and got a package of letters. Found she had been sent from Hong Kong to tow me in, Augustine Heard & Co. having agreed for $2,300. At 10 A.M. passed hawsers, one from each bow, and started. At 11 A.M., passing St. John and going ahead six knots. Light airs from N. N. E.; set fore and aft canvas, with smooth sea. At dark, freshening from N. E. and sea making. Furled all sails. At 8 P.M. parted our hawser. Steamer backed up and got fast again. Towing all through the night from five to six knots. Six A.M., Sunday morning, passed Green Island; let go anchor and hauled in hawsers. At 8 P.M. steamer came alongside and made fast and towed us into the harbor and anchored us at Wanchai.

Thus ends this hard, tedious passage of 146 days, and I know we all ought to feel thankful that we have been spared to get here at all, while no doubt many a poor fellow has gone down in the same hard gale which we have gone through with.

Report of Recorder of Y. R. A.

(*Continued from page* 41)

of cost was set too low to insure a good boat, the owners being disappointed in either the quality of the workmanship or the performance of the boats. The classes quoted above were in no case open to these objections; they have been popular with their owners and have given general satisfaction; why most of them have ultimately declined is a question that should be satisfactorily answered before the attempt is made to start new monotype classes.

When it comes to the matter of new classes, the first question is that of Rule or One-Design. In this we encounter a marked difference of opinion on the part of experienced yachtsmen. * * * *

Last year an earnest effort was made on behalf of the association to create a new 25-Rating Class Q, but it failed through the high estimates of first cost and the general feeling that the success of some one yacht in the class would destroy the value of all others by the end of the first season. Conditions today are little changed from those of a year ago, except that the need for a new class of racing cabin yachts is more imperative than then.

The MOTOR of Power and Stamina for Men of Courage and Action

(16)

Elto 3-H.P. Light Twin OUTBOARD MOTOR

Designed and Built by Ole Evinrude

THREE times in recent months this sturdy dependable little Motor has been honored by being chosen for the three most hazardous tasks ever assigned to any Outboard Motor.

Capt. Donald B. MacMillan selected Elto exclusively for his world-famous Arctic Expedition. He writes: "It is a real pleasure for me to express my appreciation of the work done by the Elto Outboard Motor during my recent North Greenland expedition. Its reliability and astounding performance in the face of extreme conditions, such as we encountered, have knocked completely out of my mind all doubts as to its real usefulness."

Lewis R. Freeman successfully negotiated the hazardous 2,000 mile cruise from Milwaukee to New York, with only his trusty little Elto for power. Caught in a terrific gale on Lake Michigan, 12 miles off shore, he says: "Water washed over me again and again and I was forced to bale for my life, but the Elto was wonderful—it never missed a stroke. Had it given out, there would have been not one chance in ten of reaching land before swamping."

Linden B. Pentz, in a 16 ft. rowboat, chose Elto for his daring 1,000 mile expedition from Seattle to Alaska, much of it in open sea. He writes: "At Ripple's Point the waves came at us like a pack of hungry wolves until we were almost bewildered and couldn't tell which way to turn, but there was nothing to do but to head right into the sea and to hope that the motor wouldn't stop. Believe me, that plucky little engine didn't miss a beat, and when I think that all that stood between us and practically certain death was a little Elto engine driving a boat far too heavy for it, I think considerable praise is due that engine."

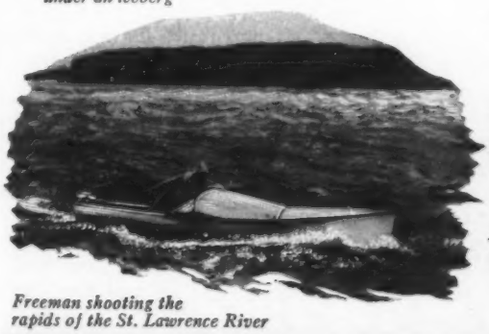
Never Before Such Performance

Such responsibility has never before been put on any Motor of its class. Surely none ever covered itself with greater glory. Elto offers you an Extra Horse Power, Much More Speed, Safe Rudder Steering, Waterproof Ignition, Instant Easy Starting, Sturdier Construction, and with all, Matchless Portability for its Power—less than 17 lbs. per horsepower.

Write for FREE Catalog

ELTO OUTBOARD MOTOR CO. Dept. 2, Manufacturers' Home Building
Ole Evinrude, *Pres.* Milwaukee, Wisconsin

MacMillan and his Elto under an iceberg



Freeman shooting the rapids of the St. Lawrence River

The Pentz family leaving Seattle

Do not confuse the Easy-Starting, Light-weight Elto Twin with any other Outboard Motor, as for 11 years Ole Evinrude, the founder of the industry has had no connection with any other Outboard Motor Co. Elto is built in his own factory

ELTO OUTBOARD MOTOR CO.
Dept. 2, Manufacturers' Home Bldg., Milwaukee, Wis.
Gentlemen—Send me complete catalog describing the new Elto Outboard Motor.

Name .....

Address .....

"STARTS WITH A TOUCH"

at the Motor Boat Show

Grand Central Palace, New York

January 2—10

Booth 36, Mezzanine

THE sensation of the Motor Boat Show is likely to be Textasote—the new processed duck.

Textasote will not leak even when subjected to water pressure far greater than could possibly occur in use. Textasote does not rot. Equipment made of it will last much longer than if ordinary duck were used. It is soft and pliable—easy to tailor and lay.

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The Flettner Rotor

(*Continued from page* 46)

than before, and it thus becomes attenuated, with the result that an area of partial *vacuum* is produced on the right side of "A." This is the Magnus Effect, and the combined result of a pressure on the left side and a vacuum on the right side is to tend to force "A" to the right. It has been discovered that the pull of the vacuum is many times stronger than the thrust of the pressure, and that the rotating cylinder, if free to move on its base, will move in a direction at right angles to the direction of the wind.

Fig. 2 represents a vessel with a rotor installed on her deck. In (2a) the rotor is rotating with the clock, with the result that, with the wind north the vessel is propelled to the east. In (2b), with the wind still north but the rotor moving contra-clockwise, the vessel moves to the west.

Fig. 3 shows a ship sailing within two points of the wind. Her foresail is replaced by a rotor and she has an ordinary sail at the main. We know that, in practice, with the wind two points on the bow, a sail has practically no effect in driving the ship ahead. Rotors, on the other hand, have, *in practice*, driven a vessel at five knots almost into the eye of the wind. Fig. 3 shows, in theory, why the sail is ineffective and why the rotor is effective. The angle XYZ measures the effectiveness of the sail, and the angle BAC that of the rotor, and it will be seen that the latter angle is by far the greater. It must be understood, also, that additional effective forces are set up by the action of the rotor, but these further effects are beyond the scope of the present article.

The rotor ship's worst point of sailing is with the wind dead aft. Fig. 4, in which "X—X" indicates the direction of effort of the rotors, shows what happens to a rotor ship with the wind blowing over her counter. She will have to make tacks to leeward when she is unfortunate enough to experience a wind blowing fair along her course. Fig. 5 explains this.

These explanations should make it clear how and why the rotors exercise an effect on the wind which is advantageous to a ship, as far as the *direction* of the effect is concerned. It is not in directional effect only, however, but in effective *force* that rotors have proved their superiority to sails. It has been found that the relatively small cylindrical area of the rotors which are installed on the trial ship exert from three to four times more driving force than did the original sails of the vessel. In other words, when the vessel was rigged as a schooner, a 10 m.p.h. wind was, to her, a light breeze. But with rotors installed, this same light breeze becomes, in effect, at least a 30 m.p.h. wind. This extraordinary effect is almost beyond belief; but the present rotor ship has proved it to be true; and when further trials have re-proved the proof, we shall just have to sit down and try to believe the incredible. It was hard to believe the claims made after the first trials of wireless telegraphy—but we believe them now.

The effect of a hurricane on a rotor ship has yet to be ascertained, but, in theory, rotor ships will be hove to, as in Fig. 6, where the heeling effect of the wind is diverted to a fore-and-aft effect. Here the effect of the pull of the rotors is to straighten the vessel out and keep her beam to the wind; and in practice it is found that, by reducing the speed of rotation of the after rotor, less pull is exercised astern, so that the stern falls off and the ship looks up into the wind.

This account by Weston Martyr, who made a trip out of Kiel on the rotor ship, is the clearest we have seen on the principle of the Flettner Rotor. However, we do not necessarily agree with his forecast as to the future use of the rotor for ship propulsion. There are still many mechanical difficulties to surmount.—Ed.

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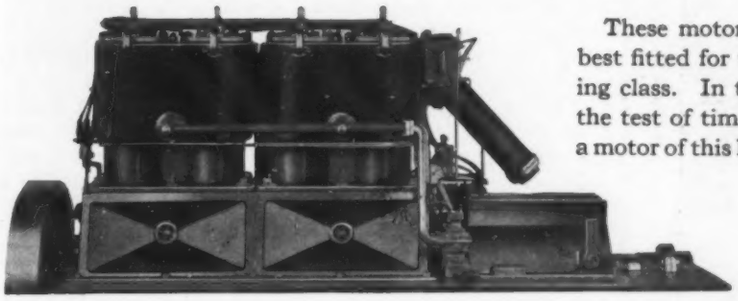

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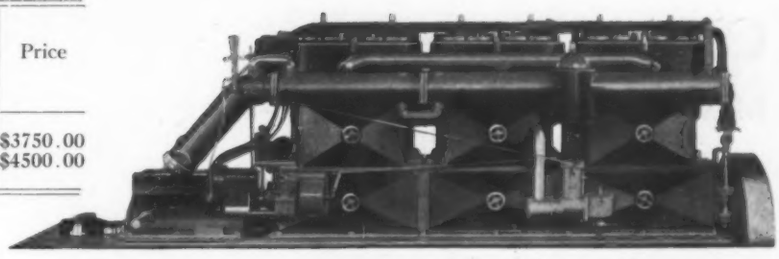

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